

To: Jim Snyder/AA/USEPA/US@EPA[]
Cc: Linc Wehrly/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;David Good/AA/USEPA/US@EPA;Arvon Mitcham/AA/USEPA/US@EPA[]; tephen Healy/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;David Good/AA/USEPA/US@EPA;Arvon Mitcham/AA/USEPA/US@EPA[]; hris Nevers/AA/USEPA/US@EPA;David Good/AA/USEPA/US@EPA;Arvon Mitcham/AA/USEPA/US@EPA[]; avid Good/AA/USEPA/US@EPA;Arvon Mitcham/AA/USEPA/US@EPA[]; rvon Mitcham/AA/USEPA/US@EPA[]
From: Ex. 7
Sent: Thur 1/8/2009 7:11:31 PM
Subject: RE: Fw: Hybrid Vehicle Meeting in Early 2009

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From: Snyder.Jim@epamail.epa.gov [mailto:Snyder.Jim@epamail.epa.gov]
Sent: Thursday, December 11, 2008 4:30 PM
To: Ex. 7
Subject: Re: Fw: Hybrid Vehicle Meeting in Early 2009

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Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

Linc Wehrly/AA/USEPA/US

12/09/2008 08:07 AM

To Jim Snyder/AA/USEPA/US@EPA
cc Stephen Healy/AA/USEPA/US@EPA, Chris Nevers/AA/USEPA/US@EPA
Subject Fw: Hybrid Vehicle Meeting in Early 2009

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Manager, Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4286
wehrly.linc@epa.gov
----- Forwarded by Linc Wehrly/AA/USEPA/US on 12/09/2008 08:06 AM -----

Ex. 7

Received Date:

12/08/2008 04:55 PM

Transmission Date:

12/08/2008 04:55:42 PM

To Linc Wehrly/AA/USEPA/US@EPA, David Good/AA/USEPA/US@EPA, Jim
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Emission Regulations and Certification
Engineering and Environmental Office

Volkswagen Group of America, Inc.

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From: CN=Jim Snyder/OU=AA/O=USEPA/C=US
Sent: Thur 1/8/2009 7:22:05 PM
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3800 Hamlin Road

Auburn Hills, MI 48326

Phone: (248) 754-4204

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FAX: (248) 754-4207

E-Mail: leonard.kata@vw.com

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Sent: Thursday, January 08, 2009 2:24 PM
To: Ex. 7
Subject: RE: Fw: Hybrid Vehicle Meeting in Early 2009

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Cc: []
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From: CN=Jim Snyder/OU=AA/O=USEPA/C=US
Sent: Thur 1/22/2009 6:27:08 PM
Subject: Bugatti

Len, I wanted to let you know I put the Bugatti Request for Certificate on hold. I didn't see anything in the Bugatti application regarding durability so I assumed its relying on VW? I checked with Arvon and VW Audi has not yet submitted Requests for 2010 Durability Approval.

Let me know if I missed something otherwise we need a durability approval request.

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From: CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA
Sent: Thur 1/29/2009 7:51:37 PM
Subject: Invitation: VW : Hybrid Vehicle Meeting Part 1 of possibly 2 (Mar 5 01:00 PM EST in AA-C126/AA-OTAQ-OFFICE@EPA)

EPA / Volkswagen meeting with engineers from Germany: They want to meet Thursday and Friday. I hope to get more detail regarding the topics so that we know what will be presented Thursday.

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We would like to use the opportunity to share our thoughts on these topics and discuss the intent and direction of the agencies. At this time I would like to suggest meeting with each agency separately, in the mid-February to early-March time frame. My questions are 1.) whether the agencies are agreeable to such a meeting, 2.) who you would recommend participate from the agencies, and 3.) if there any particular time constraints during the suggested period.

I appreciate your consideration of this suggestion and look forward to hearing from you.

Best regards,
Len

To: CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=David Good/OU=AA/O=USEPA/C=US@EPA;leonard.kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA[]; N=David Good/OU=AA/O=USEPA/C=US@EPA;leonard.kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA[]; eonard.kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA[]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA[]; N=Stephen Healy/OU=AA/O=USEPA/C=US@EPA[]
Cc: CN=Arvon Mitcham/OU=AA/O=USEPA/C=US@EPA;CN=Martin Reineman/OU=AA/O=USEPA/C=US@EPA[]; N=Martin Reineman/OU=AA/O=USEPA/C=US@EPA[]
From: CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA
Sent: Thur 1/29/2009 7:57:16 PM
Subject: Invitation: VW : Hybrid Vehicle Meeting Part 2 of possibly 2 (Mar 5 09:00 AM EST in AA-C126/AA-OTAQ-OFFICE@EPA)

EPA / Volkswagen meeting with engineers from Germany: They want to meet Thursday and Friday. I hope to get more detail regarding the topics so that we know what will be presented Thursday or spill over to Friday. .

My colleagues in at our parent company in Germany have expressed an interest in meeting with the certification staff at EPA and ARB to discuss issues related to hybrid vehicle technology and certification. The following is a general list of the topics of interest:

- HEV Concepts/Technology
- Certification, Durability, Emissions Measurement
- Test Procedures
- Pressurized Fuel Tank
- Bench Testing
- Other

We would like to use the opportunity to share our thoughts on these topics and discuss the intent and direction of the agencies. At this time I would like to suggest meeting with each agency separately, in the mid-February to early-March time frame. My questions are 1.) whether the agencies are agreeable to such a meeting, 2.) who you would recommend participate from the agencies, and 3.) if there any particular time constraints during the suggested period.

I appreciate your consideration of this suggestion and look forward to hearing from you.

Best regards,

Len

To: "Kata, Leonard" [Leonard.Kata@vw.com]
Cc: []
Bcc: []
From: CN=Jim Snyder/OU=AA/O=USEPA/C=US
Sent: Thur 1/29/2009 8:12:16 PM
Subject: RE: Fw: Hybrid Vehicle Meeting in Early 2009

Got your voice mail. I already scheduled the room so we're safe on that point. You should have an invitation. I picked the big one next to the lobby so we have lots of room. Let me know when you have more specifics and I'll pass it on so we can coordinate who's there/when.

Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

To: Jim Snyder/AA/USEPA/US@EPA[]
From: "Reineke, Dennis"
Sent: Fri 1/30/2009 3:49:44 PM
Subject: Audi Durability Grouping Request

Hello Jim,

In response to the questions raised in our recent phone call about durability and test group grouping the paragraph below provides Audi AG's intent.

Audi intends to use a catalyst with a 66% higher loading rate as part of their strategy to meet CARB 2010 MY catalyst efficiency monitoring requirements. This change will occur as part of the carryover of the 50-State certified Audi S6 and S8 models. All vehicles in the durability group/test group will be built with the new catalyst. Engine calibration, catalyst size, catalyst location and catalyst precious metal composition are all unchanged. The only difference compared to previous model years is the increased precious metal loading rate. Initial development testing shows a reduction of approximately 15% in emissions and no effect on fuel economy. Based on supplier testing and Audi AG's experience with similar catalyst the deterioration rate for this new catalyst is expect to be equal to or better than the existing catalyst. Audi intends include this catalyst in carryover durability group AADXGPNN385 / Test Group AADXV05.2385. Durability factors from the 2007-09 MY carryover durability vehicle would be used to support 2010 MY certification. A new durability vehicle would not be required.

We believe this approach is allowed under 86.1820-01(e)

Please review and contact me with any questions.

Best Regards,

Dennis E. Reineke
Certification Specialist
Engineering and Environmental Office

Volkswagen Group of America

3800 Hamlin Road
Mail Code EEO
Auburn Hills, MI 48326
USA
Phone: +1-248-754-4215
Fax: +1-248-754-4207
Mail To: Dennis.Reineke@vw.com

To: "Reineke, Dennis" [Dennis.Reineke@vw.com]
Cc: []
Bcc: []
From: CN=Jim Snyder/OU=AA/O=USEPA/C=US
Sent: Wed 2/4/2009 9:22:54 PM
Subject: Re: Audi Durability Grouping Request

You are requesting to include the 2010 Audi S6 and S8 in the same durability group as the previous 2007-09 even though it has a revised catalyst loading. Section 86.1820-01 (e) allows Administrative approval to include vehicles in a common durability group given evidence that emissions deterioration and component durability will be equivalent or better. Based on the changes outlined below (66% higher catalyst loading) while all else is the same (carryover), I think there is sufficient evidence that this package will have an equivalent degree of deterioration. After reviewing the request and discussing amongst the Certification group members, we agree that this application (with higher loading) can be included in durability group AADXPNN385 and Test group AADXV05.2385.

Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

"Reineke, Dennis" <Dennis.Reineke@vw.com>
01/30/2009 10:49 AM
To: Jim Snyder/AA/USEPA/US@EPA
cc
Subject: Audi Durability Grouping Request

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We believe this approach is allowed under 86.1820-01(e)

Please review and contact me with any questions.

Best Regards,

Dennis E. Reineke
Certification Specialist
Engineering and Environmental Office

Volkswagen Group of America
3800 Hamlin Road
Mail Code EEO
Auburn Hills, MI 48326
USA
Phone: +1-248-754-4215
Fax : +1-248-754-4207
Mail To: Dennis.Reineke@vw.com

To: Bruce Sdunek/AA/USEPA/US@EPA;Jim Snyder/AA/USEPA/US@EPA[]; im
Snyder/AA/USEPA/US@EPA[]
From: Ex. 7
Sent: Thur 2/12/2009 1:19:43 PM
Subject: MY 2002 Bentley (Rolls Royce Test Group) Field Fix
CBI 2RRXV06.7TTC APP F02 R00.PDF

Ex. 7

Hello Bruce and Jim,

I'm sending this to both of you since there hasn't been a formal announcement as to who is our EPA cert engineer.

The attachment contains a field fix for MY 2002 Bentley models in Rolls Royce test group 2RRXV06.7TTC. I would submit it through our Rolls Royce Verify account, but the Verify system only goes back to MY 2003 which makes that account useless. We did not have any Roll Royce test groups in MY 2003.

If you have any questions regarding the attached information, please contact me as indicated below.

Best regards,

Ex. 7

Volkswagen Group of America, Inc.

Ex. 7

VOLKSWAGEN

GROUP OF AMERICA

Mr. David Good
Compliance and Innovative Strategies Division
Office of Mobile Sources
U. S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, MI 48105

Leonard W. Kata Name
Manager – Emis. Cert. Title
EEO Department
248-754-4204 Phone
248-754-4207 Fax
leonard.kata@vw.com E-Mail

February 10, 2009 Date

Subject: Field Fix for 2002 Model Year Bentley Light Duty Vehicles
-Test Group 2RRXV06.7TTC and Evaporative Family
2RRXR0200E96

VOLKSWAGEN GROUP OF AMERICA, INC
3800 HAMILIN ROAD
AUBURN HILLS, MI 48326
PHONE +1 248 754 5000

Dear Mr. Good,

Volkswagen of America Inc. ("VWoA") is the sole importer and distributor of Bentley motor cars in the United States, and submits this document on behalf of Bentley Motors Limited ("BML"), the manufacturer.

With this letter we wish to inform the agency of a field fix for the following test group.

Test Group	2RRXV06.7TTC
Evaporative Family	2RRXR0200E96
Models	Bentley Arnage, Bentley Arnage LWB
Transmission	A4

The enclosed page describes Field Fix FF_2B6.7TTC_02_09, which is an update to the Engine Control Module (ECM) calibration to prevent the limp home mode activation under certain cruise control circumstances. Details of the issue, analysis and resolution are described in the enclosure.

Also shown in the enclosure are the new Calibration Identification (CAL ID) and Calibration Verification Numbers (CVN) that will be used for the field fix on 2002 MY vehicles.

If you have any questions with regard to this information please contact our office in Auburn Hills at (248) 754-4215 or (248) 754-4224.

Sincerely,

A handwritten signature in black ink, appearing to read "LW Kata", with a stylized flourish at the end.

Leonard W. Kata
Volkswagen Group of America, Inc.

Engineering and Environmental Office

Enclosure(s)

Field Fix MY 2002

Subject : Test Group: 2RRXV06.7TTC
Models: Bentley Arnage
Bentley Arnage LWB
Transmission: A4

RC / FF Nr.: FF_2B6.7TTC_02_09

Event: Limp home mode activation during cruise control operation -
Diagnostic Trouble Code (DTC) P0606 is set as a part of
electronic throttle diagnosis.

Analysis: When the vehicle is operated in cruise control mode, under
certain circumstances the actual torque exceeds the
permissible torque. This leads to limp home mode becoming
active and fault code P0606 is logged.

Activities: The update to ECM calibration is to be used as necessary as a
field fix for the small number of 2002 MY vehicles that may
experience the above problem.

Model	Calibration Identification number (CAL ID)	Calibration Verification Number (CVN)
Bentley Arnage	PB106106PV	DEC7A15C
	PB110307PN	6A5BAA03
	PB110307PS	E1F1A999
	PB106107PQ	547B8213
Bentley Arnage LWB	PB106107PQ	547B8213

**Impact on
Emissions:** This change does not cause an impact on emissions.

Test Data: Not applicable.

Running Change/Field Fix Log

Model Year: 2002
Test Group: 2RRXV06.7TTC
Evaporative Family: 2RRXR0200E96

Running Change / Field Fix Number	Description of Change / Reason	Date
FF_2B6.7TTC_01_08	Revised ECM calibration to resolve possible false detection of a very small leak P0456.	June 23, 2008
FF_2B6.7TTC_02_09	Revised ECM calibration to resolve cruise control concern.	February 03, 2009

Prefixes:

RC = Running Change
FF = Field Fix
RF = RC/FF

To: David Good/AA/USEPA/US@EPA[]

Cc:

Tom Ball/AA/USEPA/US@EPA; Tom
Anderson/AA/USEPA/US@EPA; Jim Snyder/AA/USEPA/US@EPA; Joel
Ball/AA/USEPA/US@EPA; Lynn Sohacki/AA/USEPA/US@EPA; Linc
Wehrly/AA/USEPA/US@EPA;
Anderson/AA/USEPA/US@EPA; Jim Snyder/AA/USEPA/US@EPA; Joel
Ball/AA/USEPA/US@EPA; Lynn Sohacki/AA/USEPA/US@EPA; Linc
Wehrly/AA/USEPA/US@EPA;"
Snyder/AA/USEPA/US@EPA; Joel Ball/AA/USEPA/US@EPA; Lynn
Sohacki/AA/USEPA/US@EPA; Linc Wehrly/AA/USEPA/US@EPA;"
Joel Ball/AA/USEPA/US@EPA; Lynn
Sohacki/AA/USEPA/US@EPA; Linc Wehrly/AA/USEPA/US@EPA
Lynn Sohacki/AA/USEPA/US@EPA; Linc
Wehrly/AA/USEPA/US@EPA;"
Wehrly/AA/USEPA/US@EPA;"

From:

Sent: Fri 2/13/2009 4:29:41 PM

Subject: RE: 2007 IUVP - potential IUCP - Audi Q7 test group 7ADXT04.2358

Dave,

Thank you for taking the time to write the e-mail.

Your decision to test three vehicles instead of two is acceptable for
us.

Procurement of the vehicles has been already initiated and we expect to
have finished the testing of the three vehicles by end of April.
The test results will be reported through the VERIFY-System.

If you have any questions please don't hesitate to contact me.
Have a nice weekend,

<http://www.vw.com>

<http://www.audiusa.com>

-----Original Message-----

From: Good.David@epamail.epa.gov [mailto:Good.David@epamail.epa.gov]

Sent: Thursday, February 12, 2009 7:10 PM

To: I

Cc: Ball.Tom@epamail.epa.gov;
Anderson.Tom@epamail.epa.gov; Snyder.Jim@epamail.epa.gov;
Ball.Joel@epamail.epa.gov; Sohacki.Lynn@epamail.epa.gov;
Wehrly.Linc@epamail.epa.gov
Subject: Re: 2007 IUVP - potential IUCP - Audi Q7 test group
7ADXT04.2358

As we discussed today by telephone, both EPA and ARB approve your request to test additional IUVP vehicles under 40 CFR 1845-04 (b)(3)---provided VW/Audi test three additional IUVP vehicles (instead of two vehicles).

Please let us know if that is acceptable to you and when you plan to test the three vehicles.

Thanks

To
David Good/AA/USEPA/US@EPA
02/05/2009 cc
09:14 AM

Subject
2007 IUVP - potential IUCP - Audi
Q7 test group 7ADXT04.2358

Hello Dave,

Following our conversation on the phone from last week, I would like to ask you to take following into consideration when you decide about the number of vehicles to be tested for this MY2007 test group:

- 9,700 is the total vehicle volume sold in this test group. This low volume made it difficult to find many vehicles/customers willing to participate in the 2007 program, and will likely be the case for an

IUCP. Some of the difficulty procuring vehicles is a result of their being high end vehicles

- 1.307 g/mi is the average result for the mentioned test group - the regs require 1.30 g/mi. The small sample size and the difference between the results of the vehicles tested, raises a question about the significance of this result.

Considering these circumstances our suggestion is to test 2 more vehicles from CA. If those vehicles pass the test with a result in NMOG lower than 75% of the standard than we propose to stop procurement and testing, and ask EPA to accept the test group requirements for IUCP as fulfilled.

In case the results are higher than 75% of the standard, we propose to procure and test another 2 vehicles. When all these 4 vehicles are below the emission standard, we request that EPA accept the test group requirements for IUCP as being fulfilled.

As for the questions that came up concerning any reports about this test group either in California or Federal, since we did not find anything, my conclusion is that there are none.

However there are some technical bulletins which do not have a relevant influence on emissions. In this test group there are two vehicles the AUDI-Q7 and the VW-Touareg. The technical bulletins are listed after the car model:

AUDI-Q7

- #2015106/5 - 01 MIL on (DTC P310B and/or P129F) In case of MIL on and one of the above mentioned DTC, due to fuel intrusion into the low-pressure fuel pressure sensor (G410), a false signal may be sent to the controller, resulting in a reading that is out of tolerance.

- #2014753/5 - 01 MIL on, gasoline quality (DTC P0300 or P030x, lean condition DTCs) The use of contaminated gasoline may result in severe condition that will illuminate the MIL in conjunction with storage of above mentioned DTC's.

- #2017475/2 - 01 MIL/EPC on (P0087, P0088, P310B) In case MIL/EPC warning light comes on once with the DTC mentioned above logged in the memory no parts should be replaced and basic settings in MVB 103 to adapt fuel system have to be run.

- #2017843/3 - RVU - Fuel pressure sensor replacement (CL / 24M4) A malfunction of fuel pressure sensor G410 may cause an incorrect fuel pressure reading from the ECM. In this case the sensor has to be replaced with an improved one.

VW-Touareg:

- #2011168/4 - 01-07-54 - Engine Control Module (ECM), DO NOT Replace for These Diagnostic Trouble Codes (DTCs) ECM Modules were replaced unnecessary. This TB should be a diagnostic aid.

- #2014658/3 - 20-07-11 - Evaporative Emission (EVAP) system, Diagnostic Trouble Code Diagnosis A revised procedure is developed to test EVAP system without removing fuel cap.

Please let me know what your decision is regarding our suggestion.

Thank you for your support and understanding, Edy

<http://www.vw.com>
<http://www.audiusa.com>

-----Original Message-----

From: Good.David@epamail.epa.gov [mailto:Good.David@epamail.epa.gov]
Sent: Tuesday, January 27, 2009 12:50 PM
To:
Cc: Anderson.Tom@epamail.epa.gov;
Ball.Tom@epamail.epa.gov; [Ex. 7]@arb.ca.gov
Subject: 207 IUVP - potential IUCP - Audi Q7 test group 7ADXT04.2358

As we discussed, EPA believes that Audi Q7 test group 7ADXT04.2358 qualifies for the IUCP testing.

Attached are a spread sheet with the data plus a generic test plan letter to EPA (in case you should need it).

Please advise.

Thanks

(See attached file: potential Audi IUCP_MY 2007 on Sep 15 08_.xls)(See attached file: Generic IUCP Test Plan.109.doc)

To: Jim Snyder/AA/USEPA/US@EPA[]
From: "Kata, Leonard"
Sent: Mon 2/16/2009 11:07:38 PM
Subject: FW: MY2010 Durability Approvals

Hi Jim:

Second attempt. I received an "undeliverable" response to the 'synder.jim@epa.gov' address.

Regards,

Len

Leonard W. Kata
Manager
Emission Regulations and Certification
Engineering and Environmental Office

Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
Phone: (248) 754-4204
Cell: (248) 797-3886
FAX: (248) 754-4207
E-Mail: leonard.kata@vw.com

-----Original Message-----

From: Kata, Leonard
Sent: Monday, February 16, 2009 6:04 PM
To: 'Mitcham.Arvon@epamail.epa.gov'
Cc: "
Subject: RE: MY2010 Durability Approvals

Hello Arvon:

I left a telephone message, but I thought that I would follow-up with an e-mail.

I am interested in the status of the VW request for carryover of the durability program to 2010. Any news?

Best regards,

Len

Leonard W. Kata
Manager
Emission Regulations and Certification
Engineering and Environmental Office

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3800 Hamlin Road
Auburn Hills, MI 48326
Phone: (248) 754-4204
Cell: (248) 797-3886
FAX: (248) 754-4207
E-Mail: leonard.kata@vw.com

-----Original Message-----

From: Kata, Leonard
Sent: Friday, January 30, 2009 7:06 PM
To: 'Mazaitis.Vincent@epamail.epa.gov'
Cc: 'Mitcham.Arvon@epamail.epa.gov'; Reineke, Dennis; Hart, Robert (VWoA)
Subject: RE: MY2010 Durability Approvals

Hello Mr. Mazaitis:

For the 2010 model year, Volkswagen is requesting carryover of the previously-approved durability procedure. You will find that I have submitted the official request through the VERIFY system for review. It was submitted as Volkswagen input; however, as described in the letter, it applies to all Volkswagen Group brands sold in North America (Volkswagen, Audi, Bentley, Lamborghini and Bugatti).

Please let me know if there are any questions,

Best regards,

Leonard W. Kata
Manager
Emission Regulations and Certification
Engineering and Environmental Office

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-----Original Message-----

From: Reineke, Dennis
Sent: Thursday, January 29, 2009 2:07 PM
To: 'Mazaitis.Vincent@epamail.epa.gov'
Cc: Kata, Leonard
Subject: RE: MY2010 Durability Approvals

Hello Vince,

D
Sent by: Arvon
Mitcham
MY2010 Durability Approvals
Received Date:
01/22/2009 11:24
AM
Transmission
Date:
01/22/2009
11:24:16 AM

cc
Subject

I am waiting for durability approval requests from the following manufacturers:

VW-Audi

If you are the compliance rep. for one of these manufacturers, please remind them that they need to request approval of durability for MY2010 prior to certification. If not, they are in non-compliance with 40 CFR 86.1823-08 (Durability Regulations).

All other manufacturers not listed here have either been approved or are small volume and using assigned DFs.

If you have questions or concerns, let me know. Thank you.

-ALM

To: "Kata, Leonard" [Leonard.Kata@vw.com]
Cc: []
Bcc: []
From: CN=Jim Snyder/OU=AA/O=USEPA/C=US
Sent: Tue 2/17/2009 4:30:40 PM
Subject: Re: FW: MY2010 Durability Approvals

Yes, that address , 'synder.jim@epa.gov' , is incorrect. I found out its in the online directory and I'm trying to get it updated.

Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

"Kata, Leonard" <Leonard.Kata@vw.com>
02/16/2009 06:07 PM
To Jim Snyder/AA/USEPA/US@EPA
cc
Subject FW: MY2010 Durability Approvals

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Engineering and Environmental Office

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Emission Regulations and Certification
Engineering and Environmental Office

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-----Original Message-----

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Sent: Thursday, January 29, 2009 2:07 PM
To: 'Mazaitis.Vincent@epamail.epa.gov'
Cc: Kata, Leonard
Subject: RE: MY2010 Durability Approvals

Hello Vince,

I am forwarding this to Len Kata who is currently working on this topic.

Best Regards,

Dennis

Dennis E. Reineke
Certification Specialist
Engineering and Environmental Office

Volkswagen Group of America

3800 Hamlin Road
Mail Code EEO
Auburn Hills, MI 48326
USA
Phone: +1-248-754-4215
Fax : +1-248-754-4207
Mail To: Dennis.Reineke@vw.com

-----Original Message-----

From: Mazaitis.Vincent@epamail.epa.gov
[mailto:Mazaitis.Vincent@epamail.epa.gov]
Sent: Thursday, January 29, 2009 8:33 AM
To: Reineke, Dennis
Subject: Fw: MY2010 Durability Approvals

Hello Dennis,

I hope all is well.

Not sure if you're the right contact or not for durability issues.
Please let me know if you are not the right person.

For your information.

Thanks Dennis,

Kind regards,,

Vince Mazaitis

----- Forwarded by Vincent Mazaitis/AA/USEPA/US on 01/29/2009 08:28 AM

Arvon
Mitcham/AA/USEPA
/US
EPA-OAR,OTAQ,CIS To
D OAR-OTAQ-CISD-LDVG
Sent by: Arvon cc
Mitcham Subject
MY2010 Durability Approvals
Received Date:
01/22/2009 11:24
AM
Transmission
Date:
01/22/2009
11:24:16 AM

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VW-Audi

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All other manufacturers not listed here have either been approved or are

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If you have questions or concerns, let me know. Thank you.

-ALM

To: Jim Snyder/AA/USEPA/US@EPA[]
Cc: Chris Nevers/AA/USEPA/US@EPA;David Good/AA/USEPA/US@EPA;"Kata, Leonard" [Leonard.Kata@vw.com]; David Good/AA/USEPA/US@EPA;"Kata, Leonard" [Leonard.Kata@vw.com]; Kata, Leonard" [Leonard.Kata@vw.com]; inc Wehrly/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA[]; tephen Healy/AA/USEPA/US@EPA[]
From: "Kata, Leonard"
Sent: Wed 2/18/2009 4:36:52 PM
Subject: Meeting With Volkswagen Group Representatives
[Agenda EPA Cert draft.ppt](#)

Hello Jim:

I have recently received a draft agenda for the meeting that we have scheduled on March 5-6, 2009. A copy is attached.

Again, we welcome the participation of any additional EPA Staff that you believe would be appropriate. If further clarification is required, or if this draft agenda prompts additional topics that EPA would like us to address, please let me know.

I will be out of the office until the middle of next week and have no access to e-mail. Please feel free to leave a message at my desk telephone or cell phone, if necessary.

Best regards,

Len

Leonard W. Kata
Manager
Emission Regulations and Certification
Engineering and Environmental Office

Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
Phone: (248) 754-4204
Cell: (248) 797-3886
FAX: (248) 754-4207
E-Mail: leonard.kata@vw.com

To: "Kata, Leonard" [Leonard.Kata@vw.com]
Cc: CN=Lynn Sohacki/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA[]; N=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA[]; N=Stephen Healy/OU=AA/O=USEPA/C=US@EPA[]
From: CN=Arvon Mitcham/OU=AA/O=USEPA/C=US
Sent: Mon 2/23/2009 6:43:09 PM
Subject: Re: MY 2008 Equivalency Factors VW_AUDI UPDATE.xls
[MY 2008 Equivalency Factors VW_AUDI UPDATE.xls](#)
[10DUR-VWA-26654.pdf](#)

Dear Mr. Kata:

Attached is an electronic version of your 2010 Model Year Durability Approval Letter. A hard-copy has also been sent to you and it should be arriving soon. If you do not receive it, please let us know and we can send another hard copy or you can use this electronic version to generate a copy.

If you have any questions or concerns, please let us know. Thank you for your cooperation and we look forward to working with you in the future.

- Arvon L. Mitcham
Project Manager/Engineer
U.S. Environmental Protection Agency
Office of Transportation and Air Quality
Compliance and Innovative Strategies Division

"Kata, Leonard" <Leonard.Kata@vw.com>
Sent by: "Kata, Leonard" <Leonard.Kata@vw.com>
Received Date:
10/23/2008 11:56 AM
Transmission Date:
10/23/2008 11:56:54 AM
To Arvon Mitcham/AA/USEPA/US@EPA
cc
Subject MY 2008 Equivalency Factors VW_AUDI UPDATE.xls

Hello Arvon:

I have updated your industry spreadsheet with MY 2008 Equivalency Factors for Volkswagen, Audi, Bentley, Lamborghini, and Bugatti (see attachment). The only section that I worked on has the cells highlighted

light green. Updates include:

- Addition of missing information
- Removal of duplicated rows
- Grouping of information by Test Group and displacement (although I put the VW and Audi LDTs at the end of their respective lists)
- Addition of Bugatti
- Notation of Assigned DFs

I wasn't sure if you wanted to call out Bentley, Lamborghini, and Bugatti as manufacturers separate from the Volkswagen list.

Please let me of Bob Hart (robert.hart@vw.com) know if you have any additional questions.

Best regards,

Len

Leonard W. Kata
Manager
Emission Regulations and Certification
Engineering and Environmental Office

Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
Phone: (248) 754-4204
Cell: (248) 797-3886
FAX: (248) 754-4207
E-Mail: leonard.kata@vw.com

ASTON MARTIN									
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)	
BMW									
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)	
BMW	128i / 128i Convertible	3.0L	8BMB03.0N52	50 States	8BMBXGPGNNV3B	Tier 2, Bin 5 / ULEV2	120,000	0.86	
BMW	323i	3.0L	8BMB03.0N52	50 States	8BMBXGPGNNV3B	Tier 2, Bin 5 / ULEV2	120,000	0.86	
BMW	328i / 328i Sport Wagon 328Xi / 328Xi Sport Wagon	3.0L	8BMB03.0N52	50 States	8BMBXGPGNNV3B	Tier 2, Bin 5 / ULEV2	120,000	0.86	
BMW	328Ci / 328Ci Convertible / 328CXi	3.0L	8BMB03.0N52	50 States	8BMBXGPGNN2VA	Tier 2, Bin 5 / SULEV2	120,000	????	
BMW	528i / 528Xi	3.0L	8BMB03.0N52	50 States	8BMBXGPGNNV3B	Tier 2, Bin 5 / ULEV2	120,000	0.86	
BMW	X3 3.0i / 3.0Si	3.0L	8BMB03.0N52	50 States	8BMBXGPGNNV3B	Tier 2, Bin 5 / ULEV2	120,000	0.86	
BMW	Z4 3.0i / Z4 3.0Si / Z4 Coupe	3.0L	8BMB03.0N52	50 States	8BMBXGPGNNV3B	Tier 2, Bin 5 / ULEV2	120,000	0.86	
BMW	328Ci / 328Ci Convertible / 328CXi	3.0L	8BMB03.0N51	50 States	8BMBXGPGNN2VA	Tier 2, Bin 5 / SULEV2	120,000	????	
BMW	328i / 328Xi	3.0L	8BMB03.0N51	50 States	8BMBXGPGNNV3B	Tier 2, Bin 5 / ULEV2	120,000	0.86	
BMW	335i / 335Xi	3.0L	8BMBV03.0N54	50 States	8BMBXGPGNNV3E	Tier 2, Bin 5 / LEV2	120,000	1.97	
BMW	135i / 135i Convertible	3.0L	8BMBV03.0N54	50 States	8BMBXGPGNNV3E	Tier 2, Bin 5 / LEV2	120,000	1.97	
BMW	335Ci / 335Ci Convertible / 335CXi	3.0L	8BMBV03.0N54	50 States	8BMBXGPGNNV3E	Tier 2, Bin 5 / LEV2	120,000	1.97	
BMW	535i / 535Xi / 535Xi Sport Wagon	3.0L	8BMBV03.0N54	50 States	8BMBXGPGNNV3E	Tier 2, Bin 5 / LEV2	120,000	1.97	
BMW	X5 3.0Si	3.0L	8BMBT03.0E70	50 States	8BMBXGPGNNV3D	Tier 2, Bin 5 / ULEV2	120,000	????	
BMW	Z4 M Roadster / Z4 M Coupe	3.2L	8BMBV03.2LV2	50 States	8BMBXGPGNNV50	Tier 2, Bin 5 / LEV2	120,000	????	
BMW	550i	4.8L	8BMBV04.8UL2	50 States	8BMBXGPGNNV48	Tier 2, Bin 5 / ULEV2	120,000	2.03	
BMW	650Ci / 650Ci Convertible	4.8L	8BMBV04.8UL2	50 States	8BMBXGPGNNV48	Tier 2, Bin 5 / ULEV2	120,000	2.03	
BMW	750i / 750Li	4.8L	8BMBV04.8UL2	50 States	8BMBXGPGNNV48	Tier 2, Bin 5 / ULEV2	120,000	2.03	
BMW	X5 4.8i	4.8L	8BMBT04.8E70	50 States	8BMBXGPGNNV4A	Tier 2, Bin 5 / ULEV2	120,000	????	
BMW	M5 / M6 / M6 Convertible	5.0L	8BMBV05.0S85	50 States	8BMBXGPGNNV50	Tier 2, Bin 5 / LEV2	120,000	Bank 1: 7.45 / Bank 2: 5.40	
BMW	760Li	6.0L	8BMBV06.0LE2	50 States	8BMBXGPGNNV6A	Tier 2, Bin 5 / LEV2	120,000	????	
ALPINA	B7	4.4L	8ABBV04.4H10	????	????	????	????	????	
MINI	MINI COOPER / MINI COOPER S Convertible	1.6L	8BMBV01.6R52	50 States	8BMBXGPGNNV1A	Tier 2, Bin 5 / LEV2	120,000	????	
ROLLS ROYCE	PHANTOM / PHANTOM Drophead Coupe / PHANTOM Extended Wheel Base	6.7l	8RRGV06.7LE2	????	????	????	????	????	

CHRYSLER									
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)	
CHRYSLER	300/SRT-8	2.7L	8CRXV02.7ME0	50 States	8CRXGPGNNF13	Tier 2, Bin 5 / LEV2	150,000		
CHRYSLER	CROSSFIRE ROADSTER	3.2L	8CRXV03.2ME0	50 States	8CRXGPGNNB01	Tier 2, Bin 5 / LEV2	120,000		
CHRYSLER	PT CRUISER	2.4L	8CRXV0148M80	California	8CRXGPGNNF11	ULEV2	120,000		
CHRYSLER	PT CRUISER	2.4L	8CRXV02.4ME1	50 States	8CRXGPGNNF09	Tier 2, Bin 5 / LEV2	120,000		
CHRYSLER	PT CRUISER	2.4L	8CRXV02.4ME3	50 States	8CRXGPGNNF10	Tier 2, Bin 5 / LEV2	150,000		
CHRYSLER	SEBRING	2.4L	8CRXB0144M80	California	8CRXGPGNNF02	ULEV2	120,000		
CHRYSLER	SEBRING	2.4L	8CRXB02.4ME0	50 States	8CRXGPGNNF04	Tier 2, Bin 5 / LEV2	120,000		
CHRYSLER	SEBRING	2.7L	8CRXV02.7MHP	Federal	8CRXGPGENF01	Tier 2, Bin 8	150,000		
CHRYSLER	SEBRING CONVERTIBLE	3.5L	8CRXB0241M80	California	8CRXGPGNNF06	ULEV2	120,000		
CHRYSLER	SEBRING CONVERTIBLE	4.0L	8CRXB04.0ME0	Federal	8CRXGPGNNF05	Tier 2, Bin 5	150,000		
CHRYSLER	SEBRING CONVERTIBLE	2.7L	8CRXV0167M70	California	8CRXGPGNNF03	LEV2	150,000		
CHRYSLER	TOWN & COUNTRY 2WD	3.8L	8CRXT0231N80	California	8CRXGPGNNF17	ULEV2	120,000		
CHRYSLER	TOWN & COUNTRY 2WD	3.3L	8CRXT03.3NEP	Federal	8CRXGPGENF18	Tier 2, Bin 5	120,000		
CHRYSLER	TOWN & COUNTRY 2WD	3.8L	8CRXT03.8NE0	Federal	8CRXGPGNNF16	Tier 2, Bin 5	150,000		
DODGE	AVENGER	2.4L	8CRXV0144MX0	California	8CRXGPGNNF12	ZEV	150,000		
DODGE	CALIBER	2.4L	8CRXV02.4ME2	50 States	8CRXGPGNNF08	Tier 2, Bin 5 / LEV2	150,000		
DODGE	CALIBER AWD	2.4L	8CRXB0144M81	California	8CRXGPGNNF07	ULEV2	120,000		
DODGE	CHARGER	6.1L	8CRXV06.1ME0	50 States	8CRXGPGNNF20	Tier 2, Bin 5 / LEV2	120,000		
DODGE	CHARGER AWD	3.5L	8CRXV0215M80	California	8CRXGPGNNF15	ULEV2	120,000		
DODGE	CHARGER AWD	3.5L	8CRXV03.5ME0	Federal	8CRXGPGNNF14	Tier 2, Bin 5	120,000		
DODGE	CHARGER AWD	5.7L	8CRXV05.7MD0	Federal	8CRXGPGNNF19	Tier 2, Bin 4	120,000		
DODGE	DAKOTA PICKUP 4WD	3.7L	8CRXT0226N80	California	8CRXGPGNNR04	ULEV2	120,000		
DODGE	NITRO 4WD	4.0L	8CRXT04.0NE0	50 States	8CRXGPGNNR11	Tier 2, Bin 5 / LEV2	150,000		
DODGE	RAM 1500 PICKUP 2WD	3.7L	8CRXT0226P80	California	8CRXGPGNNR07	ULEV2	120,000		
DODGE	RAM 1500 PICKUP 2WD	3.7L	8CRXT03.7PE0	50 States	8CRXGPGNNR02	Tier 2, Bin 5 / LEV2	120,000		
DODGE	RAM 1500 PICKUP 4WD	4.7L	8CRXT0287P80	California	8CRXGPGNNR15	ULEV2	120,000		
DODGE	RAM 1500 PICKUP 4WD	4.7L	8CRXT04.7PE0	50 States	8CRXGPGNNR13	Tier 2, Bin 5 / LEV2	120,000		
DODGE	RAM 1500 PICKUP 4WD	4.7L	8CRXT04.7PJ0	Federal	8CRXGPGENR16	Tier 2, Bin 8	120,000		
DODGE	RAM 1500 PICKUP 4WD	5.7L	8CRXT05.7PE0	50 States	8CRXGPGNNR19	Tier 2, Bin 5 / LEV2	120,000		
DODGE	RAM 2500 CAB CHAS 2WD	5.7L	8CRXK05.7TX1	50 States	8CRXGPGNNR25	Tier 2 Bin ??? / LEV2	120,000		
DODGE	RAM 3500 CAB CHAS 2WD	5.7L	8CRXK05.7TX0	50 States	8CRXGPGNNR23	Tier 2 Bin ??? / LEV3	120,000		
DODGE	VIPER CONVERTIBLE	8.4L	8CRXV08.4ME0	50 States	8CRXGPGNNR30	Tier 2, Bin 5 / LEV2	120,000		
JEEP	COMMANDER 4WD	3.7L	8CRXT03.7NE0	50 States	8CRXGPGNNR01	Tier 2, Bin 5 / LEV2	120,000		
JEEP	GRAND CHEROKEE 4WD	3.0L	8CRXT03.05RW	Federal	8CRXDPDNNR49	Tier 2, Bin 1	120,000		
JEEP	GRAND CHEROKEE 4WD	6.1L	8CRXT06.1PE0	50 States	8CRXGPGNNR21	Tier 2, Bin 5 / LEV2	120,000		
JEEP	PATRIOT 2WD	2.4L	8CRXB0144M80	California	8CRXGPGNNF02	ULEV2	120,000		
JEEP	WRANGLER 2WD	3.8L	8CRXT03.8NE1	Federal	8CRXGPGNNR08	Tier 2, Bin 5	150,000		
JEEP	WRANGLER 4WD	3.8L	8CRXT0231N81	California	8CRXGPGNNR10	ULEV2	120,000		

CUMMINS								
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)
Using the EPA SRC								

FORD MOTOR COMPANY								
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)
FORD	CROWN VICTORIA FFV	4.6L	8FMXV04.6VEF	Federal	8FMXGPENNE1A	Tier 2, Bin 5	120,000	2.28
FORD	ECONOLINE VAN	4.6L	8FMXV04.65E9	Federal	8FMXGPENNE1B	Tier 2, Bin 5	120,000	2.00
FORD	ECONOLINE E250 VAN	4.6L	8FMXK04.66RA	Federal	8FMXGPENNE4D	HDV	120,000	2.00
FORD	ECONOLINE E250 VAN	4.6L	8FMXK04.65HA	Federal	8FMXGPENNE4D	HDV	120,000	2.00
FORD	ECONOLINE E250 VAN	4.6L	8FMXT04.65HA	50 States	8FMXGPENNE4D	Tier 2, Bin 8 / ULEV2	120,000	2.00
FORD	ECONOLINE E350 VAN	5.4L	8FMXK05.46R3	Federal	8FMXGPENNE6A	HDV	120,000	1.95
FORD	ECONOLINE E350 VAN	5.4L	8FMXT05.45H2	50 States	8FMXGPENNE6A	Tier 2, Bin 8 / ULEV2	120,000	1.95
FORD	ECONOLINE E350 VAN	6.8L	8FMXT06.85HR	Federal	8FMXGPENNE6A	Tier 2, Bin 8	120,000	1.95
FORD	EDGE	3.5L	8FMXT03.52EB	50 States	8FMXGPENND5A	Tier 2, Bin 5 / ULEV2	120,000	2.07
FORD	ESCAPE 4WD (Automatic)	2.3L	8FMXT02.31EA	50 States	8FMXGPENNE3A	Tier 2, Bin 5 / ULEV2	120,000	2.20
FORD	ESCAPE 4WD (Manual)	2.3L	8FMXT02.31EF	50 States	8FMXGPENNE3A	Tier 2, Bin 5 / ULEV2	120,000	2.20
FORD	ESCAPE 2WD	3.0L	8FMXT03.01EB	50 States	8FMXGPENNE4B	Tier 2, Bin 5 / LEV2	120,000	2.09
FORD	ESCAPE 4WD	3.0L	8FMXT03.01ED	50 States	8FMXGPENNE4F	Tier 2, Bin 5 / LEV2	120,000	2.09
FORD	ESCAPE 4WD	3.0L	8FMXT03.02EC	50 States	8FMXGPENNE4B	Tier 2, Bin 5 / LEV2	120,000	2.09
FORD	ESCAPE 4WD	3.0L	8FMXT03.02EJ	50 States	8FMXGPENNE4F	Tier 2, Bin 5 / LEV2	120,000	2.09
FORD	ESCAPE HEV 4WD	2.3L	8FMXT02.32ZE	50 States	8FMXHHGNNNE1A	Tier 2, Bin 3 / S2	120,000	1.75
FORD	EXPLORER 4WD	4.0L	8FMXT04.03DB	Federal	8FMXGPENNE3G	Tier 2, Bin 4 / ULEV2	120,000	3.18
FORD	EXPLORER 4WD	4.6L	8FMXT04.63BX	California	8FMXGPENNE2F	ULEV2	120,000	2.08
FORD	EXPLORER 4WD	4.6L	8FMXT04.63EZ	50 States	8FMXGPENND5A	Tier 2, Bin 5 / ULEV2	120,000	2.07
FORD	EXPLORER 4WD	4.6L	8FMXT04.63EZ	Federal	8FMXGPENND5A	Tier 2, Bin 5	120,000	2.07
FORD	EXPEDITION	5.4L	8FMXT05.44E6	50 States	8FMXGPENND2A	Tier 2, Bin 5 / ULEV2	120,000	2.40
FORD	F150 FFV 4WD	5.4L	8FMXT05.43HP	Federal	8FMXGPENND2A	Tier 2, Bin 8	120,000	2.55
FORD	F150 FFV 4WD	5.4L	8FMXT05.44E2	Federal	8FMXGPENND1A	Tier 2, Bin 5	120,000	2.40
FORD	F150 STX FFV 4WD	5.4L	8FMXT05.44HF	Federal	8FMXGPENND2A	Tier 2, Bin 8	120,000	2.55
FORD	F150 PICKUP 2WD	4.2L	8FMXT04.23A4	California	8FMXGPENNE2B	LEV2	120,000	0.94
FORD	F150 PICKUP 2WD	4.2L	8FMXT04.23HA	Federal	8FMXGPENNE5B	Tier 2, Bin 8	120,000	2.53
FORD	F150 PICKUP 4WD	4.6L	8FMXT04.63AB	California	8FMXGPENNE3B	LEV2	120,000	2.10
FORD	F150 PICKUP 4WD	4.6L	8FMXT04.63HB	Federal	8FMXGPENND3A	Tier 2, Bin 8	120,000	2.32
FORD	F150 STX	5.4L	8FMXT05.43DP	Federal	8FMXGPENND2A	Tier 2, Bin 4	120,000	2.40
FORD	F150 PICKUP 4WD	5.4L	8FMXT05.44D7	Federal	8FMXGPENND2A	Tier 2, Bin 4	120,000	2.40
FORD	F150 Harley-Davidson	5.4L	8FMXT05.44D7	Federal	8FMXGPENND2A	Tier 2, Bin 4	120,000	2.40
FORD	F150 Harley-Davidson	5.4L	8FMXT05.44HA	Federal	8FMXGPENND5B	Tier 2, Bin 8	120,000	2.55
FORD	F150 PICKUP 4WD	5.4L	8FMXT05.44HA	Federal	8FMXGPENND5B	Tier 2, Bin 8	120,000	2.55
FORD	F350 4WD	5.4L	8FMXK05.46RG	50 States	8FMXGPENNE4C	HDV / ULEV2	120,000	1.60
FORD	F350 4WD	6.8L	8FMXK06.86RA	50 States	8FMXGPENNE4C	HDV / ULEV2	120,000	1.60
FORD	F350 4WD	6.8L	8FMXK06.87RB	50 States	8FMXGPENNE4C	HDV / LEV2	120,000	1.60
FORD	F350 INCOMPLETE 4WD	5.4L	8FMXK05.46BG	50 States	8FMXGPENNE2E	HDV / ULEV2	120,000	2.20
FORD	F350 INCOMPLETE 4WD	5.4L	8FMXK05.47RE	50 States	8FMXGPENNE4C	HDV / ULEV2	120,000	1.60
FORD	FOCUS FWD	2.0L	8FMXV02.0VDA	Federal	8FMXGPENND2C	Tier 2, Bin 4	120,000	1.40
FORD	FOCUS FWD	2.0L	8FMXV02.0VZP	50 States	8FMXGPENND1A	Tier 2, Bin 3 / SULEV2	120,000	1.80
FORD	FUSION FWD (Manual)	2.3L	8FMXV02.3VEU	Federal	8FMXGPENNE3C	Tier 2, Bin 5 / ULEV2	120,000	1.74
FORD	FUSION FWD (Automatic)	2.3L	8FMXV02.3VEU	Federal	8FMXGPENNE3C	Tier 2, Bin 5	120,000	1.74
FORD	FUSION FWD	2.3L	8FMXV02.3VEX	Federal	8FMXGPENND2D	Tier 2, Bin 5 / ULEV2	120,000	2.20
FORD	FUSION FWD	2.3L	8FMXV02.3VZT	California	8FMXGPENNE1B	SULEV2	150,000	2.57
FORD	FUSION AWD	3.0L	8FMXV03.0VEK	50 States	8FMXGPENND2B	Tier 2, Bin 5 / ULEV2	120,000	1.63
FORD	FUSION AWD	3.0L	8FMXV03.0VEJ	Federal	8FMXGPENND4A	Tier 2, Bin 5	120,000	1.36
FORD	MUSTANG	4.0L	8FMXV04.0VER	50 States	8FMXGPENNE4A	Tier 2, Bin 5 / ULEV2	120,000	3.03
FORD	MUSTANG	4.0L	8FMXV04.0VES	50 States	8FMXGPENND5C	Tier 2, Bin 5 / ULEV2	120,000	3.14
FORD	MUSTANG	4.6L	8FMXV04.6VBB	California	8FMXGPENNE3E	ULEV2	120,000	2.25
FORD	MUSTANG	4.6L	8FMXV05.4VEK	50 States	8FMXGPENNE5A	Tier 2, Bin 5 / LEV2	120,000	1.45
FORD	MUSTANG	5.4L	8FMXV05.4VEK	50 States	8FMXGPENNE5A	Tier 2, Bin 5 / LEV2	120,000	1.45
FORD	RANGER 4WD	3.0L	8FMXT03.01BK	California	8FMXGPENNE2D	ULEV2	120,000	1.07
FORD	RANGER 4WD	3.0L	8FMXT03.01EM	Federal	8FMXGPENND4A	Tier 2, Bin 5	120,000	1.36
FORD	RANGER 4WD	3.0L	8FMXT03.02BB	California	8FMXGPENNE2D	ULEV2	120,000	1.07
FORD	RANGER 4WD	3.0L	8FMXT03.02EH	Federal	8FMXGPENND4A	Tier 2, Bin 5	120,000	1.36
FORD	RANGER 4WD	4.0L	8FMXT04.02EG	50 States	8FMXGPENNE4E	Tier 2, Bin 5 / LEV2	120,000	2.30
FORD	RANGER 2WD	2.3L	8FMXT02.31BA	California	8FMXGPENNE2A	ULEV2	120,000	2.20
FORD	RANGER 2WD	2.3L	8FMXT02.31EL	Federal	8FMXGPENNE3F	Tier 2, Bin 5	120,000	2.20
FORD	SPORT TRAC 4WD	4.0L	8FMXT04.03DB	Federal	8FMXGPENNE3G	Tier 2, Bin 4, ULEV2	120,000	3.18
FORD	SPORT TRAC 4WD	4.6L	8FMXT04.63BX	California	8FMXGPENNE2F	ULEV2	120,000	2.08
FORD	SPORT TRAC AWD	4.6L	8FMXT04.63EZ	50 States	8FMXGPENND5A	Tier 2, Bin 5 / ULEV2	120,000	2.07
FORD	SPORT TRAC AWD	4.6L	8FMXT04.63EZ	Federal	8FMXGPENND5A	Tier 2, Bin 5	120,000	2.07
FORD	TAURUS X AWD	3.5L	8FMXV03.51ZL	California	8FMXGPENNE1A	SULEV2	150,000	2.23
FORD	TAURUS / TAURUS X AWD	3.5L	8FMXV03.5VEP	50 States	8FMXGPENND5A	Tier 2, Bin 5	120,000	2.07
FORD	TOWN CAR	4.6L	8FMXV04.6VE9	California	8FMXGPENND5A	LEV2	120,000	2.28
FORD	TOWN CAR LIMOUSINE	4.6L	8FMXV04.6VE2	Federal	8FMXGPENNE3H	Tier 2, Bin 4	120,000	2.28

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FORD MOTOR COMPANY (cont.)								
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)
LINCOLN-MERCURY	GRAND MARQUIS FFV	4.6L	8FMXV04.6VEF	Federal	8FMXGPENNE1A	Tier 2, Bin 5	120,000	2.28
LINCOLN-MERCURY	MARINER 2WD	3.0L	8FMXT03.01EB	50 States	8FMXGPGNNE4B	Tier 2, Bin 5 / LEV2	120,000	2.09
LINCOLN-MERCURY	MARINER 4WD	3.0L	8FMXT03.02EC	50 States	8FMXGPGNNE4B	Tier 2, Bin 5 / LEV2	120,000	2.09
LINCOLN-MERCURY	MARINER HEV 4WD	2.3L	8FMXT02.32ZE	50 States	8FMXHGGNNE1A	Tier 2, Bin 3 / SULEV2	120,000	1.75
LINCOLN-MERCURY	MARK LT	5.4L	8FMXT05.44D7	Federal	8FMXGPGNND2A	Tier 2, Bin 4	120,000	2.40
LINCOLN-MERCURY	MARK LT	5.4L	8FMXT05.44HA	Federal	8FMXGPGNND5B	Tier 2, Bin 8	120,000	2.55
LINCOLN-MERCURY	MILAN AWD	3.0L	8FMXV03.0VEJ	Federal	8FMXGPGNND4A	Tier 2, Bin 5	120,000	1.36
LINCOLN-MERCURY	MILAN AWD	3.0L	8FMXV03.0VEK	50 States	8FMXGPGNND2B	Tier 2, Bin 5 / ULEV2	120,000	1.63
LINCOLN-MERCURY	MILAN FWD (Manual)	2.3L	8FMXV02.3VEU	Federal	8FMXGPGNNE3C	Tier 2, Bin 5 / ULEV2	120,000	1.74
LINCOLN-MERCURY	MILAN FWD (Automatic)	2.3L	8FMXV02.3VEU	Federal	8FMXGPGNNE3C	Tier 2, Bin 5	120,000	1.74
LINCOLN-MERCURY	MILAN FWD	2.3L	8FMXV02.3VEX	Federal	8FMXGPGNND2D	Tier 2, Bin 5 / ULEV2	120,000	2.20
LINCOLN-MERCURY	MILAN FWD	2.3L	8FMXV02.3VZT	California	8FMXGPGNNE1B	SULEV2	150,000	2.57
LINCOLN-MERCURY	MKX	3.5L	8FMXT03.52EB	50 States	8FMXGPGNND5A	Tier 2, Bin 5 / ULEV2	120,000	2.07
LINCOLN-MERCURY	MKZ	3.5L	8FMXV03.5VEP	Federal	8FMXGPGNND5A	Tier 2, Bin 5	120,000	2.07
LINCOLN-MERCURY	MOUNTAINEER 4WD	4.6L	8FMXT04.63BX	California	8FMXGPGNNE2F	ULEV2	120,000	2.08
LINCOLN-MERCURY	MOUNTAINEER 4WD	4.6L	8FMXT04.63EZ	50 States	8FMXGPGNND5A	Tier 2, Bin 5 / ULEV2	120,000	2.07
LINCOLN-MERCURY	MOUNTAINEER 4WD	4.6L	8FMXT04.63EZ	Federal	8FMXGPGNND5A	Tier 2, Bin 5	120,000	2.07
LINCOLN-MERCURY	NAVIGATOR LIMOUSINE 2WD	5.4L	8FMXT05.45AB	Federal	8FMXGPGNND2A	Tier 2, Bin 8	120,000	2.40
LINCOLN-MERCURY	NAVIGATOR LIMOUSINE 4WD	5.4L	8FMXT05.45AB	Federal	8FMXGPGNND2A	Tier 2, Bin 8	120,000	2.40
LINCOLN-MERCURY	NAVIGATOR 4WD	5.4L	8FMXT05.44E6	50 States	8FMXGPGNND2A	Tier 2, Bin 5 / ULEV2	120,000	2.40
LINCOLN-MERCURY	SABLE	3.5L	8FMXV03.5VEP	50 States	8FMXGPGNND5A	Tier 2, Bin 5	120,000	2.07
MAZDA	B-Series 2WD	2.3L	8FMXT02.31BA	California	8FMXGPGNNE2A	ULEV2	120,000	2.20
MAZDA	B-Series 4WD	3.0L	8FMXT03.01BK	California	8FMXGPGNNE2D	ULEV2	120,000	1.07
MAZDA	B-Series 4WD	3.0L	8FMXT03.02BB	California	8FMXGPGNNE2D	ULEV2	120,000	1.07
MAZDA	B-Series 4WD	3.0L	8FMXT03.01EM	Federal	8FMXGPGNND4A	Tier 2, Bin 5	120,000	1.36
MAZDA	B-Series 4WD	3.0L	8FMXT03.02EH	Federal	8FMXGPGNND4A	Tier 2, Bin 5	120,000	1.36
MAZDA	B-Series 4WD	4.0L	8FMXT04.02EG	50 States	8FMXGPGNNE4E	Tier 2, Bin 5 / LEV2	120,000	2.30
MAZDA	TRIBUTE 4WD (Automatic)	2.3L	8FMXT02.31EA	50 States	8FMXGPGNNE3A	Tier 2, Bin 5 / LEV2	120,000	2.20
MAZDA	TRIBUTE 4WD (Manual)	2.3L	8FMXT02.31EF	50 States	8FMXGPGNNE3A	Tier 2, Bin 5, ULEV2	120,000	2.20
MAZDA	TRIBUTE 2WD	3.0L	8FMXT03.01EB	50 States	8FMXGPGNNE4B	Tier 2, Bin 5 / LEV2	120,000	2.09
MAZDA	TRIBUTE 4WD	3.0L	8FMXT03.02EC	50 States	8FMXGPGNNE4B	Tier 2, Bin 5 / LEV2	120,000	2.09
MAZDA	TRIBUTE HEV 4WD	2.3L	8FMXT02.32ZE	50 States	8FMXHGGNNE1A	Tier 2, Bin 3 / SULEV2	120,000	1.75

GENERAL MOTORS CORPORATION								
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)
BUICK	LACROSSE/ALLURE	3.6L	8GMXV03.6041	50 States	8GMXGPGNNB20	Tier 2, Bin 5 / LEV2	120,000	????
BUICK	LUCERNE	3.8L	8GMXV03.8044	California	8GMXGPGNNA20	SULEV2	150,000	????
CADILLAC	CTS AWD	3.6L	8GMXV03.6053	50 States	8GMXGPGNNA11	Tier 2, Bin 5 / LEV2	120,000	????
CADILLAC	ESCALADE EXTAWD	6.2L	8GMXT06.2382	50 States	8GMXGPGNNB18	Tier 2, Bin 5 / LEV2	120,000	1.6
CADILLAC	FUN COACH/HEARS	4.6L	8GMXV04.6065	Federal	8GMXGPGNNB25	Tier 2, Bin 5	120,000	????
CADILLAC	FUN COACH/HEARS	4.6L	8GMXV04.6066	Federal	8GMXGPGNNB25	Tier 2, Bin 4	120,000	????
CADILLAC	SRX AWD	3.6L	8GMXB03.6148	50 States	8GMXGPGNNA12	Tier 2, Bin 5 / LEV2	120,000	????
CADILLAC	SRX AWD	4.6L	8GMXB04.6167	50 States	8GMXGPGNNA14	Tier 2, Bin 5 / LEV2	120,000	2.2
CHEVROLET	CLASSIC	2.2L	8GMXV02.2028	50 States	8GMXGPGNNA01	Tier 2, Bin 5 / LEV2	120,000	????
CHEVROLET	COBALT	2.2L	8GMXV02.2030	California	8GMXGPGNNB01	SULEV2	150,000	????
CHEVROLET	COBALT	2.4L	8GMXV02.4025	50 States	8GMXGPGNNA10	Tier 2, Bin 5 / LEV2	120,000	1.5
CHEVROLET	COLORADO 4WD	2.9L	8GMXT02.9189	Federal	8GMXGPGNNA27	Tier 2, Bin 5	120,000	????
CHEVROLET	COLORADO 4WD	2.9L	8GMXT02.9190	Federal	8GMXGPGNNA27	Tier 2, Bin 4	120,000	????
CHEVROLET	CORVETTE	6.2L	8GMXV06.2081	Federal	8GMXGPGNNA29	Tier 2, Bin 5	120,000	????
CHEVROLET	CORVETTE	6.2L	8GMXV06.2086	Federal	8GMXGPGNNA29	Tier 2, Bin 4	120,000	????
CHEVROLET	CORVETTE	7L	8GMXV07.0085	50 States	8GMXGPGNNB21	Tier 2, Bin 5 / LEV2	120,000	????
CHEVROLET	EQUINOX AWD	3.8L	8GMXB03.8146	50 States	8GMXGPGNNB16	Tier 2, Bin 5, ULEV2	120,000	????
CHEVROLET	G15/25VANCONV2W	4.3L	8GMXT04.3186	Federal	8GMXGPGNNB17	Tier 2, Bin 5	120,000	1.3
CHEVROLET	H15 VAN CONVAWD	5.3L	8GMXT05.3373	Federal	8GMXGPGNNB19	Tier 2, Bin 5	120,000	1.6
CHEVROLET	H15 VAN CONVAWD	5.3L	8GMXT05.3384	50 States	8GMXGPGNNB18	Tier 2, Bin 5 / LEV2	120,000	1.6
CHEVROLET	HHR FWD	2L	8GMXV02.0021	50 States	8GMXGPGNNB08	Tier 2, Bin 5 / LEV2	120,000	1.6
CHEVROLET	HHR FWD	2.4L	8GMXV02.4032	50 States	8GMXGPGNNA06	Tier 2, Bin 5, ULEV2	120,000	????
CHEVROLET	IMPALA	3.9L	8GMXV03.9052	Federal	8GMXGPGNNB11	Tier 2, Bin 5	120,000	????
CHEVROLET	IMPALA	5.3L	8GMXV05.3084	50 States	8GMXGPGNNB31	Tier 2, Bin 5 / LEV2	120,000	????
????	????	????	8GMXV06.0082	50 States	8GMXGPGNNB33	Tier 2, Bin 5 / LEV2	120,000	2.1
CHEVROLET	K15 SLVRADO 4WD	5.3L	8GMXT05.3379	Federal	8GMXGPGNNB03	Tier 2, Bin 8	120,000	1.6
CHEVROLET	K15 SLVRADO 4WD	5.3L	8GMXT05.3380	Federal	8GMXGPGNNA03	Tier 2, Bin 4	120,000	1.6
CHEVROLET	K15 SLVRADO 4WD	5.3L	8GMXT05.3381	Federal	8GMXGPGNNA04	Tier 2, Bin 4	120,000	????
CHEVROLET	K15 SLVRADO 4WD	6.0L	8GMXT06.0383	Federal	8GMXGPGNNA03	Tier 2, Bin 4	120,000	1.6
CHEVROLET	K35SLVRADO4WD	6.0L	8GMXK06.0389	50 States	8GMXGPGNNB13	HDV / LEV2	120,000	1.1
CHEVROLET	K35SLVRADO4WD	6.0L	8GMXK06.0396	50 States	8GMXGPGNNB06	HDV / LEV2	120,000	1.1
CHEVROLET	MALIBU	2.4L	8GMXV02.4027	50 States	8GMXGPGNNA05	Tier 2, Bin 5 / LEV2	120,000	1.2
CHEVROLET	MALIBU HYBRID	2.4L	8GMXV02.4040	50 States	8GMXHHGNNA07	Tier 2, Bin 5 / LEV2	120,000	????
CHEVROLET	TRAILBLAZER AWD	6L	8GMXT06.0387	50 States	8GMXGPGNNB15	Tier 2, Bin 8 / LEV2	120,000	1.6
CHEVROLET	UPLANDER FWD	3.9L	8GMXT03.9140	Federal	8GMXGPGNNA24	Tier 2, Bin 5	120,000	????
HUMMER	H2 SUT 4WD	6.2L	8GMXT06.2394	Federal	8GMXGPGNNB07	Tier 2, Bin 8	120,000	1.0
HUMMER	H3 4WD	3.7L	8GMXT03.7187	50 States	8GMXGPGNNA19	Tier 2, Bin 5 / LEV2	120,000	????
HUMMER	H3 4WD	3.7L	8GMXT03.7188	Federal	8GMXGPGNNA19	Tier 2, Bin 4	120,000	????
HUMMER	H3 4WD	5.3L	8GMXT05.3376	Federal	8GMXGPGNNB12	Tier 2, Bin 5	120,000	1.4
HUMMER	H3 4WD	5.3L	8GMXT05.3377	Federal	8GMXGPGNNB12	Tier 2, Bin 4	120,000	1.4
PONTIAC	G6	3.5L	8GMXV03.5043	50 States	8GMXGPGNNA22	Tier 2, Bin 5 / ULEV2	120,000	????
PONTIAC	MONTANA SV6 FWD	3.9L	8GMXB03.9142	50 States	8GMXGPGNNA26	Tier 2, Bin 5 / LEV2	120,000	????
PONTIAC	SOLSTICE	2L	8GMXV02.0020	50 States	8GMXGPGNNA02	Tier 2, Bin 5 / LEV2	120,000	1.2
PONTIAC	SOLSTICE	2.4L	8GMXV02.4031	50 States	8GMXGPGNNA08	Tier 2, Bin 5 / LEV2	120,000	1.6
SAAB	9-3 CONV	2.8L	8GMXV02.8004	50 States	8GMXGPGNNA16	Tier 2, Bin 5 / LEV2	120,000	2.0
SAAB	9-5 SPORTCOMBI	2.3L	8GMXV02.3001	50 States	8GMXGPGNNA13	Tier 2, Bin 5 / LEV2	120,000	????
SAAB	9-7X AWD	4.2L	8GMXT04.2185	Federal	8GMXGPGNNB22	Tier 2, Bin 5	120,000	????
SAAB	9-7X AWD	4.2L	8GMXT04.2186	Federal	8GMXGPGNNB22	Tier 2, Bin 4	120,000	????
SAAB	9-7X AWD	4.2L	8GMXT04.2188	Federal	8GMXGPGNNB22	Tier 2, Bin 4	120,000	????
SATURN	OUTLOOK AWD	3.6L	8GMXT03.6151	50 States	8GMXGPGNNA21	Tier 2, Bin 5 / LEV2	120,000	????
SATURN	VUE FWD	2.4L	8GMXT02.4123	Federal	8GMXGPGNNB04	Tier 2, Bin 5	120,000	1.6
SATURN	VUE FWD	2.4L	8GMXT02.4124	Federal	8GMXGPGNNB04	Tier 2, Bin 4	120,000	1.6
SATURN	VUE HYBRID	2.4L	8GMXT02.4130	Federal	8GMXHHGNNB02	Tier 2, Bin 5	120,000	????
SATURN	VUE HYBRID	2.4L	8GMXT02.4135	Federal	8GMXHHGNNB02	Tier 2, Bin 4	120,000	????

GM-DAT								
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)
CHEVROLET	AVEO	1.6L	8GDXV01.6D04	50 States	8GDXGPGNND3W	Tier 2, Bin 5 / ULEV2	120,000	????
SUZUKI	FORENZA WAGON	2L	8GDXV02.0D04	50 States	8GDXGPGNND2W	Tier 2, Bin 5 / ULEV2	120,000	????

HONDA								
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)
ACURA	MDX 4WD	3.7L	8HNXT03.7PKR	50 States	8HNXGPGNNPBV	Tier 2, Bin 5 / ULEV2	120,000	????
ACURA	RDX 4WD	2.3L	8HNXT02.3DKR	50 States	8HNXGPGNNDBV	Tier 2, Bin 5 / ULEV2	120,000	????
ACURA	RL	3.5L	8HNXV03.5HKR	50 States	8HNXGPGNNHBV	Tier 2, Bin 5 / ULEV2	120,000	????
ACURA	3.5 TL	3.5L	8HNXV03.5RKR	50 States	8HNXGPGNNPBV	Tier 2, Bin 5 / ULEV2	120,000	Front Catalyst: 0.575 Rear Catalyst: 0.546
HONDA	ACCORD 4DR SEDAN	2.4L	8HNXV02.4EMC	50 States	8HNXGPGNNBVB	Tier 2, Bin 2 / SULEV2	120,000	0.75
HONDA	ACCORD 4DR SEDAN	2.4L	8HNXV02.4TKR	50 States	8HNXGPGNNBVC	Tier 2, Bin 5 / ULEV2	120,000	????
HONDA	ACCORD 4DR SEDAN	3.5L	8HNXV03.5BMC	50 States	8HNXGPGNNBVB	Tier 2, Bin 2 / SULEV2	120,000	0.75
HONDA	ACCORD 4DR SEDAN	3.5L	8HNXV03.5VKR	50 States	8HNXGPGNNBVC	Tier 2, Bin 5 / ULEV2	120,000	????
HONDA	CIVIC	1.8L	8HNXV01.8LKR	50 States	8HNXGPGNNLBV	Tier 2, Bin 5 / ULEV2	120,000	0.77
HONDA	CIVIC	1.8L	8HNXV01.8XW3	50 States	8HNXGPGNNXVB	Tier 2, Bin 2 / SULEV2	120,000	0.77
HONDA	CIVIC	2.4L	8HNXV02.4FKC	50 States	8HNXGPGNNFBV	Tier 2, Bin 5 / LEV2	120,000	0.77
HONDA	CIVIC HYBRID	1.3L	8HNXV01.3ZCP	50 States	8HNXHHGNNZVB	Tier 2, Bin 2 / SULEV2	120,000	????
HONDA	CR-V 4WD	2.4L	8HNXT02.4KKR	50 States	8HNXGPGNNKBV	Tier 2, Bin 5 / ULEV2	120,000	0.78
HONDA	ELEMENT 4WD	2.4L	8HNXV02.4CKC	50 States	8HNXGPGNNCBV	Tier 2, Bin 5 / LEV2	120,000	????
HONDA	FIT	1.5L	8HNXV01.5JKC	50 States	8HNXGPGNNJBV	Tier 2, Bin 5 / LEV2	120,000	1.22
HONDA	ODYSSEY 2WD	3.5L	8HNXT03.5NKR	50 States	8HNXGPGNNVBV	Tier 2, Bin 5 / ULEV2	120,000	????
HONDA	RIDGELINE 4WD	3.5L	8HNXT03.5MKR	50 States	8HNXGPGNNMBV	Tier 2, Bin 5 / ULEV2	120,000	????
HONDA	S2000	2.2L	8HNXV02.2AKC	50 States	8HNXGPGNNABV	Tier 2, Bin 5 / LEV2	120,000	????

HYUNDAI MOTOR COMPANY								
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)
HYUNDAI MOTOR COMPANY	SANTA FE 2WD	2.7L	8HYXT02.7CW5	50 States	8HYXGPGNNCW5	Tier 2, Bin 5 / ULEV2	120,000	1.05
HYUNDAI MOTOR COMPANY	SANTA FE 2WD	3.3L	8HYXT03.3PW5	50 States	8HYXGPGNNPW5	Tier 2, Bin 5 / ULEV2	120,000	1.02
HYUNDAI MOTOR COMPANY	VERACRUZ 2WD	3.8L	8HYXT03.8EM5	50 States	8HYXGPGNNEM5	Tier 2, Bin 5 / LEV2	120,000	1.02
HYUNDAI MOTOR COMPANY	TIBURON	2.0L	8HYXV02.0GW5	50 States	8HYXGPGNNGW5	Tier 2, Bin 5 / ULEV2	120,000	1.15
HYUNDAI MOTOR COMPANY	TIBURON	2.7L	8HYXV02.7KM5	50 States	8HYXGPGNNKM5	Tier 2, Bin 5 / LEV2	120,000	1.08
HYUNDAI MOTOR COMPANY	ELANTRA	2.0L	8HYXV02.0HPC	California	8HYXGPGNNHPC	SULEV	150,000	????
HYUNDAI MOTOR COMPANY	ELANTRA	2.0L	8HYXV02.0HW5	50 States	8HYXGPGNNHW5	Tier 2, Bin 5 / ULEV2	120,000	????
HYUNDAI MOTOR COMPANY	TUCSON 2WD	2.0L	8HYXT02.0JW5	50 States	8HYXGPGNNJW5	Tier 2, Bin 5 / ULEV2	120,000	1.17
HYUNDAI MOTOR COMPANY	TUCSON 2WD	2.7L	8HYXT02.7MM5	50 States	8HYXGPGNNMM5	Tier 2, Bin 5 / LEV2	120,000	1.02
HYUNDAI MOTOR COMPANY	ACCENT 2-door Hatchback / Sedan	1.6L	8HYXV01.6MW5	50 States	8HYXGPGNNMW5	Tier 2, Bin 5 / ULEV2	120,000	????
HYUNDAI MOTOR COMPANY	SONATA	2.4L	8HYXV02.4SW5	50 States	8HYXGPGNNSW5	Tier 2, Bin 5 / ULEV2	120,000	0.92
HYUNDAI MOTOR COMPANY	SONATA	3.3L	8HYXV03.3FW5	50 States	8HYXGPGNNFW5	Tier 2, Bin 5 / ULEV2	120,000	????
HYUNDAI MOTOR COMPANY	AZERA	3.3L	8HYXV03.3TW5	50 States	8HYXGPGNNTW5	Tier 2, Bin 5 / ULEV2	120,000	0.94
HYUNDAI MOTOR COMPANY	AZERA	3.8L	8HYXV03.8AW5	50 States	8HYXGPGNNAW5	Tier 2, Bin 5 / ULEV2	120,000	1.15

KIA MOTORS CORPORATION								
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)
KIA MOTORS CORPORATION	SORENTO 2WD	3.3L	8KMXV03.3BM5	50 States	8KMXGPGNNBM5	Tier 2, Bin 5 / LEV2	120,000	????
KIA MOTORS CORPORATION	SORENTO 2WD	3.8L	8KMXV03.8LM5	50 States	8KMXGPGNNLM5	Tier 2, Bin 5 / LEV2	120,000	1.06
KIA MOTORS CORPORATION	AMANTI	3.8L	8KMXV03.8HW5	50 States	8KMXGPGNNHW5	Tier 2, Bin 5 / ULEV2	120,000	????
KIA MOTORS CORPORATION	RIO	1.6L	8KMXV01.6BW5	50 States	8KMXGPGNNBW5	Tier 2, Bin 5 / ULEV2	120,000	0.83
KIA MOTORS CORPORATION	SPORTAGE 2WD	2.0L	8KMXV02.0KW5	50 States	8KMXGPGNNKW5	Tier 2, Bin 5 / ULEV2	120,000	????
KIA MOTORS CORPORATION	SPORTAGE 2WD	2.7L	8KMXV02.7MM5	50 States	8KMXGPGNNMM5	Tier 2, Bin 5 / LEV2	120,000	????
KIA MOTORS CORPORATION	SPECTRA	2.0L	8KMXV02.0LPC	California	8KMXGPGNNLPC	SULEV2	150,000	0.92
KIA MOTORS CORPORATION	SPECTRA	2.0L	8KMXV02.0LV5	50 States	8KMXGPGNNLV5	Tier 2, Bin 5 / ULEV2	120,000	0.92
KIA MOTORS CORPORATION	OPTIMA	2.4L	8KMXV02.4MW5	50 States	8KMXGPGNNMW5	Tier 2, Bin 5 / ULEV2	120,000	0.84
KIA MOTORS CORPORATION	OPTIMA	2.7L	8KMXV02.7GW5	50 States	8KMXGPGNNGW5	Tier 2, Bin 5 / ULEV2	120,000	0.87
KIA MOTORS CORPORATION	RONDO	2.4L	8KMXV02.4UW5	50 States	8KMXGPGNNUW5	Tier 2, Bin 5 / ULEV2	120,000	0.87
KIA MOTORS CORPORATION	RONDO	2.7L	8KMXV02.7NW5	50 States	8KMXGPGNNNW5	Tier 2, Bin 5 / ULEV2	120,000	0.92
KIA MOTORS CORPORATION	SEDONA	3.8L	8KMXV03.8VW5	50 States	8KMXGPGNNVW5	Tier 2, Bin 5 / ULEV2	120,000	????

JAGUAR								
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)

LAND ROVER								
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)
Using the EPA SRC								

MAZDA								
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)
MAZDA	CX-7 4WD	2.3L	8TKXT02.35DA	50 States	8TKXGPGNNN18	Tier 2, Bin 5 / LEV2	120,000	0.8
MAZDA	CX-9 4WD	3.7L	8TKXT03.75FA	50 States	8TKXGPGNND3A	Tier 2, Bin 5 / ULEV2	120,000	3.03
MAZDA	MAZDA 5	2.3L	8TKXV02.35DA	50 States	8TKXGPGNND28	Tier 2, Bin 5, LEV2	120,000	1.9
MAZDA	MAZDA 6	2.3L	8TKXV02.35DB	50 States	8TKXGPGNNG13	Tier 2, Bin 5 / LEV2	120,000	????
MAZDA	MAZDA 6	2.3L	8TKXV02.3NH2	California	8TKXGPGNNH36	SULEV2	150,000	1.1
MAZDA	MAZDA 6	3.0L	8TKXV03.05FA	50 States	8TKXGPGNNJ18	Tier 2, Bin 5 / ULEV2	120,000	0.7
MAZDA	MAZDA RX-8	1.3L	8TKXV01.35DA	50 States	8TKXGRGNN13	Tier 2, Bin 5 / LEV2	120,000	0.8
MAZDA	MAZDA3	2.0L	8TKXV02.0NH1	California	8TKXGPGNNE36	SULEV2	150,000	2.5
MAZDA	MAZDA3	2.3L	8TKXV02.35NM	Federal	8TKXGPGNND28	Tier 2, Bin 5	120,000	1.9
MAZDA	MAZDA3	2.3L	8TKXV02.3NH1	California	8TKXGPGNNF36	SULEV2	150,000	1.9
MAZDA	MAZDASPEED3	2.3L	8TKXV02.35NN	Federal	8TKXGPGNNV18	Tier 2, Bin 5	120,000	2.4
MAZDA	MAZDASPEED3	2.3L	8TKXV02.3NF1	California	8TKXGPGNNV18	ULEV2	120,000	2.4
MAZDA	MX-5	2.0L	8TKXV02.05FA	50 States	8TKXGPGNNK18	Tier 2, Bin 5 / ULEV2	120,000	0.9

MERCEDES-BENZ								
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)
MERCEDES-BENZ	R350 4MATIC	3.5L	8MBXB03.5U2A	50 States	8MBXGPGNNTR4	Tier 2, Bin 5 / ULEV2	120,000	????
MERCEDES-BENZ	GL450 4MATIC	5.5L	8MBXB05.5U2A	50 States	8MBXGPGNNTR6	Tier 2, Bin 5 / ULEV2	120,000	1.1
MERCEDES-BENZ	S450 4MATIC (Diesel)	5.5L	8MBXB05.5U2A	50 States	8MBXGPGNNTR6	Tier 2, Bin 5 / ULEV2	120,000	1.1
MERCEDES-BENZ	E550 4MATIC	5.5L	8MBXB05.5U2A	50 States	8MBXGPGNNTR6	Tier 2, Bin 5 / ULEV2	120,000	1.3
MERCEDES-BENZ	CL550	5.5L	8MBXB05.5U2A	50 States	8MBXGPGNNTR6	Tier 2, Bin 5 / ULEV2	120,000	1.0
MERCEDES-BENZ	S550/S550 4Matic	5.5L	8MBXB05.5U2A	50 States	8MBXGPGNNTR6	Tier 2, Bin 5 / ULEV2	120,000	1.0
MERCEDES-BENZ	SL550	5.5L	8MBXB05.5U2A	50 States	8MBXGPGNNTR6	Tier 2, Bin 5 / ULEV2	120,000	1.0
MERCEDES-BENZ	ML550 4Matic	5.5L	8MBXB05.5U2A	50 States	8MBXGPGNNTR6	Tier 2, Bin 5 / ULEV2	120,000	1.0
MERCEDES-BENZ	GL550 4Matic	5.5L	8MBXB05.5U2A	50 States	8MBXGPGNNTR6	Tier 2, Bin 5 / ULEV2	120,000	1.0
MERCEDES-BENZ	R550 4Matic	5.5L	8MBXB05.5U2A	50 States	8MBXGPGNNTR6	Tier 2, Bin 5 / ULEV2	120,000	1.0
MERCEDES-BENZ	CL550	5.5L	8MBXB05.5U2A	50 States	8MBXGPGNNTR6	Tier 2, Bin 5 / ULEV2	120,000	1.0
MERCEDES-BENZ	R63 AMG	6.3L	8MBXB06.3L2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / LEV2	120,000	2.5
MERCEDES-BENZ	CLK63 AMG Coupe/Convertible	6.3L	8MBXB06.3L2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / LEV2	120,000	2.5
MERCEDES-BENZ	E63 AMG Coupe/Convertible	6.3L	8MBXB06.3L2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / LEV2	120,000	2.5
MERCEDES-BENZ	CLS63 AMG Coupe/Convertible	6.3L	8MBXB06.3L2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / LEV2	120,000	2.5
MERCEDES-BENZ	ML63 AMG Coupe/Convertible	6.3L	8MBXB06.3L2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / LEV2	120,000	2.5
MERCEDES-BENZ	CL63 AMG	6.3L	8MBXB06.3L2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / LEV2	120,000	2.4
MERCEDES-BENZ	S63 AMG	6.3L	8MBXB06.3L2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / LEV2	120,000	2.4
MERCEDES-BENZ	E63 AMG	6.3L	8MBXB06.3L2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / LEV2	120,000	2.6
MERCEDES-BENZ	C63 AMG	6.3L	8MBXB06.3L2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / LEV2	120,000	2.6
MERCEDES-BENZ	GL320 CDI 4MATIC	3.0L	8MBXT03.0B10	Federal	8MBXDPDNNPT1	Tier 2, Bin 1	120,000	????
MERCEDES-BENZ	DODGE 2500	3.5L	8MBXT03.5BN8	Federal	8MBXGPGNNTR8	Tier 2, Bin 8	120,000	????
MERCEDES-BENZ	DODGE 3500	3.5L	8MBXT03.5L2A	50 States	8MBXGPGNNTR9	Tier 2 Bin ??? / LEV	120,000	????
MERCEDES-BENZ	G500	5.5L	8MBXT05.5L2A	50 States	8MBXGPGNNTR10	Tier 2, Bin 5 / LEV2	120,000	????
MERCEDES-BENZ	E320 BLUETEC	3.0L	8MBXV03.0BN8	Federal	8MBXDPDNNPT2	Tier 2, Bin 8	150,000	????
MERCEDES-BENZ	C300	3.0L	8MBXV03.0U2A	50 States	8MBXGPGNNTR5	Tier 2, Bin 5 / LEV2	120,000	????
MERCEDES-BENZ	CLK350 (CABRIOLET)	3.5L	8MBXV03.5BN4	Federal	8MBXGPGNNTR4	Tier 2, Bin 4	120,000	????
MERCEDES-BENZ	E350	3.5L	8MBXV03.5U2A	50 States	8MBXGPGNNTR2	Tier 2, Bin 4 / SULEV 2	120,000	2.2
MERCEDES-BENZ	E350 4MATIC (WAGON)	3.5L	8MBXV03.5U2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / ULEV2	120,000	2.2
MERCEDES-BENZ	E280 4MATIC (Diesel)	3.5L	8MBXV03.5U2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / ULEV2	120,000	2.6
MERCEDES-BENZ	C230 Coupe/Cabriolet/4MATIC (Diesel)	3.5L	8MBXV03.5U2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / ULEV2	120,000	2.1
MERCEDES-BENZ	C280 4MATIC	3.5L	8MBXV03.5U2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / ULEV2	120,000	1.8
MERCEDES-BENZ	C350 4MATIC (Diesel)	3.5L	8MBXV03.5U2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / ULEV2	120,000	1.5
MERCEDES-BENZ	CLK550 Coupe/Cabriolet	5.5L	8MBXV05.5BN4	Federal	8MBXGPGNNTR6	Tier 2, Bin 4	120,000	1.0
MERCEDES-BENZ	E550	5.5L	8MBXV05.5BN4	Federal	8MBXGPGNNTR6	Tier 2, Bin 4	120,000	1.0
MERCEDES-BENZ	CLS550	5.5L	8MBXV05.5BN4	Federal	8MBXGPGNNTR6	Tier 2, Bin 4	120,000	1.0
MERCEDES-BENZ	SL55 AMG	5.5L	8MBXV05.5L2A	50 States	8MBXGPGNNB1	Tier 2, Bin 5 / LEV2	120,000	????
MERCEDES-BENZ	MAYBACH 57/62	6.0L	8MBXV06.0U2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / LEV2	120,000	2.0
MERCEDES-BENZ	MAYBACH 57S/62S	6.0L	8MBXV06.0U2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / LEV2	120,000	2.5
MERCEDES-BENZ	S65 AMG	6.0L	8MBXV06.0U2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / LEV2	120,000	2.5
MERCEDES-BENZ	CL65 AMG	6.0L	8MBXV06.0U2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / LEV2	120,000	2.5
MERCEDES-BENZ	SL65 AMG	6.0L	8MBXV06.0U2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / LEV2	120,000	2.5
MERCEDES-BENZ	CL 600	6.0L	8MBXV06.0U2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / LEV2	120,000	2.0
MERCEDES-BENZ	S600	6.0L	8MBXV06.0U2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / LEV2	120,000	2.0
MERCEDES-BENZ	SL600	6.0L	8MBXV06.0U2A	50 States	8MBXGPGNNTR7	Tier 2, Bin 5 / LEV2	120,000	2.0

MITSUBISHI								
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)
MITSUBISHI	LANCER	2.0L 4-cylinder	8MTXV02.0G6G	California	8MTXGPGNNAR1	SULEV2	150,000	0.685
	LANCER	2.0L 4-cylinder	8MTXV02.0GRG	Federal	8MTXGPGNNAQ1	Tier 2, Bin 5	120,000	
	OUTLANDER 4WD	2.4L	8MTXT02.4GRB	50 States	8MTXGPGNNAQ2	Tier 2, Bin 5 / LEV2	120,000	
	OUTLANDER 4WD	3.0L	8MTXT03.0G6G	California	8MTXGPGNNAP2	SULEV2	150,000	
	OUTLANDER 4WD	3.0L	8MTXT03.0GRG	Federal	8MTXGPGNNAP1	Tier 2, Bin 5	120,000	
	ECLIPSE SPYDER	2.4L	8DSXV02.4G4H	California	8DSXGPGNNAM3	ULEV2	120,000	
	ECLIPSE SPYDER	2.4L	8DSXV02.4GRH	Federal	8DSXGPGNNAM2	Tier 2, Bin 5	120,000	
	ECLIPSE SPYDER	3.8L	8DSXV03.8GRB	50 States	8DSXGPGNNAM4	Tier 2, Bin 5 / LEV2	120,000	
	ECLIPSE SPYDER	3.8L	8DSXV03.8GRG	50 States	8DSXGPGNNAM4	Tier 2, Bin 5 / LEV2	120,000	
	ENDEAVOR AWD	3.8L	8DSXT03.8GRB	50 States	8DSXGPGNNAM5	Tier 2, Bin 5 / LEV2	120,000	
	GALANT	2.4L	8DSXV02.4G6G	California	8DSXGPGNNAL1	SULEV2	150,000	
	GALANT	2.4L	8DSXV02.4GRG	Federal	8DSXGPGNNAM1	Tier 2, Bin 5	120,000	

NISSAN								
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)
INFINITI	FX35 AWD	3.5L	8NSXT03.5G7A	50 States	8NSXGPGNNAAP	Tier 2, Bin 5 / LEV2	120,000	1.76
INFINITI	FX45 AWD	4.5L	8NSXT04.5G8A	50 States	8NSXGPGNNAAN	Tier 2, Bin 5 / LEV2	120,000	
INFINITI	G35X	3.5L	8NSXV03.5GAB	50 States	8NSXGPGNNAAK	Tier 2, Bin 5 / ULEV2	120,000	
INFINITI	G37 COUPE	3.7L	8NSXV03.7GAA	50 States	8NSXGPGNNAAD	Tier 2, Bin 5 / ULEV2	120,000	
INFINITI	M35X	3.5L	8NSXV03.5G7C	50 States	8NSXGPGNNAAF	Tier 2, Bin 5 / LEV2	120,000	
INFINITI	M45X	4.5L	8NSXV04.5G8A	50 States	8NSXGPGNNAAG	Tier 2, Bin 5 / LEV2	120,000	
NISSAN	ALTIMA	2.5L	8NSXV02.585A	California	8NSXGPGNNAAC	SULEV2	150,000	
NISSAN	ALTIMA	2.5L	8NSXV02.5G5A	50 States	8NSXGPGNNAAE	Tier 2, Bin 5 / LEV2	120,000	
NISSAN	ALTIMA	3.5L	8NSXV03.5G7B	50 States	8NSXGPGNNAAH	Tier 2, Bin 5 / ULEV2	120,000	
NISSAN	ALTIMA HYBRID	2.5L	8NSXV02.5G3A	California	8NSXHPGNNAAA	SULEV2	150,000	
NISSAN	FRONTIER 2WD	2.5L	8NSXT02.5G5A	50 States	8NSXGPGNNAAA	Tier 2, Bin 5 / ULEV2	120,000	
NISSAN	MAXIMA	3.5L	8NSXV03.5G7A	50 States	8NSXGPGNNAAH	Tier 2, Bin 5 / ULEV2	120,000	
NISSAN	PATHFINDER 4WD	4L	8NSXT04.0G6A	50 States	8NSXGPGNNAAQ	Tier 2, Bin 5 / ULEV2	120,000	1.76
NISSAN	QUEST	3.5L	8NSXT03.5G7C	50 States	8NSXGPGNNAAR	Tier 2, Bin 5 / ULEV2	120,000	
NISSAN	ROGUE AWD	2.5L	8NSXT02.585A	California	8NSXGPGNNAAB	SULEV2	120,000	
NISSAN	ROGUE AWD	2.5L	8NSXT02.5G5B	50 States	8NSXGPGNNAAE	Tier 2, Bin 5 / LEV2	120,000	
NISSAN	SENTRA	2L	8NSXV02.0G2A	50 States	8NSXGPGNNAAA	Tier 2, Bin 5 / ULEV2	120,000	
NISSAN	SENTRA	2.5L	8NSXV02.5G5B	50 States	8NSXGPGNNAAJ	Tier 2, Bin 5 / LEV2	120,000	
NISSAN	TITAN 4WD	5.6L	8NSXT05.6G9A	50 States	8NSXGPGNNAAS	Tier 2, Bin 5 / LEV2	120,000	
NISSAN	TITAN 4WD	5.6L	8NSXT05.6G9B	Federal	8NSXGPGNNAAS	Tier 2, Bin 5	120,000	
NISSAN	VERSA	1.8L	8NSXV01.8G1A	50 States	8NSXGPGNNAAH	Tier 2, Bin 5 / ULEV2	120,000	

PORSCHE								
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)
PORSCHE	CAYENNE	3.6L	8PRXT03.66ED	50 States	8PRXGPGNN606	Tier 2, Bin 5 / LEV2	120,000	Bank 1 Front 1.01 Rear 3.71 Bank 2 1.01 4.30
	CAYENNE S/GTS	4.8L	8PRXT04.8SED	50 States	8PRXGPGNNS08	Tier 2, Bin 5 / ULEV2	120,000	2.27
	CAYENNE Turbo	4.8L	8PRXT04.8TED	50 States	8PRXGPGNNT08	Tier 2, Bin 5 / LEV2	120,000	Using assigned DF
	BOXSTER/BOXSTER S	3.4L	8PRXV03.4C87	50 States	8PRXGPGNNCNH	Tier 2, Bin 5 / ULEV2	120,000	Using the EPA SRC/SBC
	CAYMAN/CAYMAN S	3.4L	8PRXV03.4C87	50 States	8PRXGPGNNCNH	Tier 2, Bin 5 / ULEV2	120,000	Using the EPA SRC/SBC
	911 GT2/GT3/GT3 RS	3.6L	8PRXV03.6GT3	50 States	8PRXGPGNNGT3	Tier 2, Bin 5 / LEV2	120,000	Using assigned DF
	911 Turbo / Turbo Cabriolet	3.6L	8PRXV03.6T97	50 States	8PRXGPGNNT97	Tier 2, Bin 5 / LEV2	120,000	Using assigned DF
	CARRERA 2 Coupe/Cabriolet	3.8L	8PRXV03.8997	50 States	8PRXGPGNNCNH	Tier 2, Bin 5 / LEV2	120,000	Using the EPA SRC/SBC
	CARRERA 2S Coupe/Cabriolet	3.8L	8PRXV03.8997	50 States	8PRXGPGNNCNH	Tier 2, Bin 5 / LEV2	120,000	Using the EPA SRC/SBC
	CARRERA 4 Coupe/Cabriolet	3.8L	8PRXV03.8997	50 States	8PRXGPGNNCNH	Tier 2, Bin 5 / LEV2	120,000	Using the EPA SRC/SBC
	CARRERA 4S Coupe/Cabriolet	3.8L	8PRXV03.8997	50 States	8PRXGPGNNCNH	Tier 2, Bin 5 / LEV2	120,000	Using the EPA SRC/SBC
	CARRERA 4 Targa/4S Targa	3.8L	8PRXV03.8997	50 States	8PRXGPGNNCNH	Tier 2, Bin 5 / LEV2	120,000	Using the EPA SRC/SBC

SUBARU								
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)
Using the EPA SRC								

SUZUKI								
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)
SUZUKI	Aerio	2.0L inline 4-cylinder	8SKXV1.995D1	50 States	8SKXGPGNJJVA	Tier 2, Bin 5 / LEV2	120,000	0.806
	Forenza		8GDXV02.0D04	50 States	8GDXGPGNND2W	Tier 2, Bin 5 / LEV2	120,000	0.806
	Reno		????	50 States	????	Tier 2, Bin 5 / LEV2	120,000	0.806
	Grand Vitara	2.7L V-6	8SKXV2.745E0	50 States	8GDXGPGNND2W	Tier 2, Bin 5 / LEV2	120,000	0.518
	Grand Vitara 4WD		8SKXT2.745E1	50 States				
	XL7	3.6L V-6	8GMYT03.6150	50 States	8GMYGPGNNA28	Tier 2, Bin 5 / LEV2	120,000	????

TOYOTA								
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)
LEXUS	ES 350	3.5L	8TYXV03.5BEA	50 States	8TYXGPGNN624	Tier 2, Bin 5 / ULEV2	120,000	1.09
LEXUS	GS 350 AWD	3.5L	8TYXV03.5BEB	50 States	8TYXGPGNN626	Tier 2, Bin 5 / ULEV2	120,000	1.09
LEXUS	GS 450H	3.5L	8TYXV03.5CC4	50 States	8TYXHHGNN622	Tier 2, Bin 3 / SULEV2	120,000	1.24
LEXUS	GX 470	4.7L	8TYXT04.7BEM	50 States	8TYXGPGNN62E	Tier 2, Bin 5 / ULEV2	120,000	1.09
LEXUS	GX 470	4.7L	8TYXT04.7BES	50 States	8TYXGPGNN62E	Tier 2, Bin 5 / ULEV2	120,000	1.09
LEXUS	IS 250 AWD	2.5L	8TYXV02.5BEA	50 States	8TYXGPGNN628	Tier 2, Bin 5 / ULEV2	120,000	1.09
LEXUS	LS 460 L	4.6L	8TYXV04.6BEA	50 States	8TYXGPGNN625	Tier 2, Bin 5 / ULEV2	120,000	1.09
LEXUS	LS 600HL	5.0L	8TYXV05.0CC4	50 States	8TYXHHGNN624	Tier 2, Bin 3 / SULEV2	120,000	1.24
LEXUS	LX 570	5.7L	8TYXT05.7BEX	50 States	8TYXGPGNN62H	Tier 2, Bin 5 / ULEV2	120,000	1.09
LEXUS	RX 400H 4WD	3.3L	8TYXT03.3CCU	50 States	8TYXHHGNN625	Tier 2, Bin 3 / SULEV2	120,000	1.24
LEXUS	SC 430	4.3L	8TYXV04.3AJA	50 States	8TYXGPGNN629	Tier 2, Bin 8 / LEV2	120,000	1.09
TOYOTA	4RUNNER 4WD	4.0L	8TYXT04.0AEM	50 States	8TYXGPGNN62D	Tier 2, Bin 8 / LEV2	120,000	1.09
TOYOTA	CAMRY	2.4L	8TYXV02.4BEA	50 States	8TYXGPGNN623	Tier 2, Bin 5 / ULEV2	120,000	1.09
TOYOTA	CAMRY	2.4L	8TYXV02.4HX2	California	8TYXGPGNN627	SULEV2	150,000	1.09
TOYOTA	CAMRY HYBRID	2.4L	8TYXV02.4HC3	50 States	8TYXHHGNN623	Tier 2, Bin 3 / SULEV2	120,000	1.24
TOYOTA	CAMRY SOLARA C/V	3.3L	8TYXV03.3BEA	50 States	8TYXGPGNN422	Tier 2, Bin 5 / ULEV2	120,000	1.09
TOYOTA	COROLLA MATRIX	1.8L	8TYXV01.8BEA	50 States	8TYXGPGNN622	Tier 2, Bin 5 / ULEV2	120,000	1.09
TOYOTA	HIGHLANDER 4WD	3.5L	8TYXT03.5BEM	50 States	8TYXGPGNN624	Tier 2, Bin 5 / ULEV2	120,000	1.09
TOYOTA	HIGHLANDER HYBRID 4WD	3.3L	8TYXT03.3CC4	50 States	8TYXHHGNN621	Tier 2, Bin 3 / SULEV2	120,000	1.24
TOYOTA	PRIUS	1.5L	8TYXV01.5HC3	50 States	8TYXHHGNN521	Tier 2, Bin 3 / SULEV2	150,000	1.24
TOYOTA	RAV4 2WD	2.4L	8TYXT02.4BEH	50 States	8TYXGPGNN62A	Tier 2, Bin 5 / ULEV2	120,000	1.09
TOYOTA	RAV4 4WD	2.4L	8TYXT02.4BEM	50 States	8TYXGPGNN62A	Tier 2, Bin 5 / ULEV2	120,000	1.09
TOYOTA	SCION XB	2.4L	8TYXV02.4BEB	50 States	8TYXGPGNN623	Tier 2, Bin 5 / ULEV2	120,000	1.09
TOYOTA	SCION XD	1.8L	8TYXV01.8AJA	50 States	8TYXGPGNN621	Tier 2, Bin 8 / LEV2	120,000	1.09
TOYOTA	TOYOTA TACOMA 2WD	2.7L	8TYXT02.7AEH	50 States	8TYXGPGNN62C	Tier 2, Bin 8 / LEV2	120,000	1.09
TOYOTA	TOYOTA TACOMA 4WD	2.7L	8TYXT02.7AEM	50 States	8TYXGPGNN62C	Tier 2, Bin 8 / LEV2	120,000	1.09
TOYOTA	TOYOTA TUNDRA 2WD	4.0L	8TYXT04.0AES	50 States	8TYXGPGNN62G	Tier 2, Bin 8 / LEV2	120,000	1.09
TOYOTA	TOYOTA TUNDRA 4WD	4.7L	8TYXT04.7BGX	50 States	8TYXGPGNN62F	Tier 2, Bin 5 / ULEV2	120,000	1.09
TOYOTA	YARIS	1.5L	8TYXV01.5BEA	50 States	8TYXGPGNN62K	Tier 2, Bin 5 / ULEV2	120,000	1.09

VOLKSWAGEN/AUDI								
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)
AUDI	A4	2.0L	8ADXV02.0352	50 States	8ADXGPGNN352	Tier 2, Bin 5 / ULEV2	120,000	1.68
AUDI	A4 AVANT QUATTRO	2.0L	8ADXV02.0352	50 States	8ADXGPGNN352	Tier 2, Bin 5 / ULEV2	120,000	1.68
AUDI	A4 CABRIOLET	2.0L	8ADXV02.0352	50 States	8ADXGPGNN352	Tier 2, Bin 5 / ULEV2	120,000	1.68
AUDI	A4 CABRIOLET QUATTRO	2.0L	8ADXV02.0352	50 States	8ADXGPGNN352	Tier 2, Bin 5 / ULEV2	120,000	1.68
AUDI	A4 QUATTRO	2.0L	8ADXV02.0352	50 States	8ADXGPGNN352	Tier 2, Bin 5 / ULEV2	120,000	1.68
AUDI	A3	2.0L	8ADXV02.0366	50 States	8ADXGPGNN366	Tier 2, Bin 5 / ULEV2	120,000	1.68
AUDI	TT COUPE	2.0L	8ADXV02.0366	50 States	8ADXGPGNN366	Tier 2, Bin 5 / ULEV2	120,000	1.68
AUDI	TT ROADSTER	2.0L	8ADXV02.0366	50 States	8ADXGPGNN366	Tier 2, Bin 5 / ULEV2	120,000	1.68
AUDI	A3	2.0L	8ADXV02.03UA	50 States	8ADXGPGNN3UA	Tier 2, Bin 5 / ULEV2	120,000	1.00
AUDI	A3	2.0L	8ADXV02.03PA	50 States	8ADXGPGNN3PA	Tier 2, Bin 2 / SULEV2	120,000	1.00
AUDI	A4	3.1L	8ADXV03.1374	50 States	8ADXGPGNN374	Tier 2, Bin 5 / LEV2	120,000	1.19
AUDI	A4 AVANT	3.1L	8ADXV03.1374	50 States	8ADXGPGNN374	Tier 2, Bin 5 / LEV2	120,000	1.19
AUDI	A4 AVANT QUATTRO	3.1L	8ADXV03.1374	50 States	8ADXGPGNN374	Tier 2, Bin 5 / LEV2	120,000	1.19
AUDI	A4 CABRIOLET QUATTRO	3.1L	8ADXV03.1374	50 States	8ADXGPGNN374	Tier 2, Bin 5 / LEV2	120,000	1.19
AUDI	A4 QUATTRO	3.1L	8ADXV03.1374	50 States	8ADXGPGNN374	Tier 2, Bin 5 / LEV2	120,000	1.19
AUDI	A6	3.1L	8ADXV03.1374	50 States	8ADXGPGNN374	Tier 2, Bin 5 / LEV2	120,000	1.19
AUDI	A6 AVANT QUATTRO	3.1L	8ADXV03.1374	50 States	8ADXGPGNN374	Tier 2, Bin 5 / LEV2	120,000	1.19
AUDI	A6 QUATTRO	3.1L	8ADXV03.1374	50 States	8ADXGPGNN374	Tier 2, Bin 5 / LEV2	120,000	1.19
AUDI	A3 QUATTRO	3.2L	8VWXV03.2535	50 States	8VWXGPGNN253	Tier 2, Bin 5 / LEV2	120,000	1.74
AUDI	TT COUPE QUATTRO	3.2L	8VWXV03.2535	50 States	8VWXGPGNN253	Tier 2, Bin 5 / LEV2	120,000	1.74
AUDI	TT ROADSTER QUATTRO	3.2L	8VWXV03.2535	50 States	8VWXGPGNN253	Tier 2, Bin 5 / LEV2	120,000	1.74
AUDI	A5 QUATTRO	3.2L	8ADXV03.23LC	50 States	8ADXGPGNN3LC	Tier 2, Bin 5 / LEV2	120,000	1.19
AUDI	S4	4.2L	8ADXV04.2355	50 States	8ADXGPGNN355	Tier 2, Bin 5 / LEV2	120,000	1.00
AUDI	S4 AVANT	4.2L	8ADXV04.2355	50 States	8ADXGPGNN355	Tier 2, Bin 5 / LEV2	120,000	1.00
AUDI	S4 CABRIOLET	4.2L	8ADXV04.2355	50 States	8ADXGPGNN355	Tier 2, Bin 5 / LEV2	120,000	1.00
AUDI	A6 QUATTRO	4.2L	8ADXV04.2365	50 States	8ADXGPGNN358	Tier 2, Bin 5 / LEV2	120,000	1.00
AUDI	S5	4.2L	8ADXV04.2365	50 States	8ADXGPGNN358	Tier 2, Bin 5 / LEV2	120,000	1.00
AUDI	A8	4.2L	8ADXV04.2365	50 States	8ADXGPGNN358	Tier 2, Bin 5 / LEV2	120,000	1.00
AUDI	A8 L	4.2L	8ADXV04.2365	50 States	8ADXGPGNN358	Tier 2, Bin 5 / LEV2	120,000	1.00
AUDI	RS4	4.2L	8ADXV04.2375	50 States	8ADXGPGNN375	Tier 2, Bin 5 / LEV2	120,000	1.00
AUDI	RS4 CABRIOLET	4.2L	8ADXV04.2375	50 States	8ADXGPGNN375	Tier 2, Bin 5 / LEV2	120,000	1.00
AUDI	R8	4.2L	8ADXV04.2375	50 States	8ADXGPGNN375	Tier 2, Bin 5 / LEV2	120,000	1.00
AUDI	S8	5.2L	8ADXV05.2385	50 States	8ADXGPGNN385	Tier 2, Bin 5 / LEV2	120,000	1.00
AUDI	S8	5.2L	8ADXV05.2385	50 States	8ADXGPGNN385	Tier 2, Bin 5 / LEV2	120,000	1.00
AUDI	A8 L	6.0L	8ADXV06.0359	50 States	8ADXGPGNN359	Tier 2, Bin 5 / LEV2	120,000	1.48
AUDI	Audi Q7	3.6L	8VWXT03.6276	50 States	8VWXGPGNN276	Tier 2, Bin 5 / LEV2	120,000	1.00
AUDI	Audi Q7	4.2L	8ADXT04.2358	50 States	8ADXGPGNN358	Tier 2, Bin 5 / LEV2	120,000	1.00

VOLKSWAGEN/AUDI (cont.)								
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)
VOLKSWAGEN	JETTA	2.0L	8AD XV02.03UA	50 States	8ADXGPGNN3UA	Tier 2, Bin 5 / ULEV2	120,000	1.00
VOLKSWAGEN	JETTA SPORTWAGEN	2.0L	8AD XV02.03UA	50 States	8ADXGPGNN3UA	Tier 2, Bin 5 / ULEV2	120,000	1.00
VOLKSWAGEN	GTI	2.0L	8AD XV02.03UA	50 States	8ADXGPGNN3UA	Tier 2, Bin 5 / ULEV2	120,000	1.00
VOLKSWAGEN	PASSAT	2.0L	8AD XV02.03UA	50 States	8ADXGPGNN3UA	Tier 2, Bin 5 / ULEV2	120,000	1.00
VOLKSWAGEN	PASSAT WAGON	2.0L	8AD XV02.03UA	50 States	8ADXGPGNN3UA	Tier 2, Bin 5 / ULEV2	120,000	1.00
VOLKSWAGEN	JETTA	2.0L	8AD XV02.03PA	50 States	8ADXGPGNN3PA	Tier 2, Bin 2 / SULEV2	120,000	1.00
VOLKSWAGEN	JETTA SPORTWAGEN	2.0L	8AD XV02.03PA	50 States	8ADXGPGNN3PA	Tier 2, Bin 2 / SULEV2	120,000	1.00
VOLKSWAGEN	GTI	2.0L	8AD XV02.03PA	50 States	8ADXGPGNN3PA	Tier 2, Bin 2 / SULEV2	120,000	1.00
VOLKSWAGEN	EOS	2.0L	8AD XV02.0366	50 States	8ADXGPGNN366	Tier 2, Bin 5 / ULEV2	120,000	1.68
VOLKSWAGEN	GTI	2.0L	8AD XV02.0366	50 States	8ADXGPGNN366	Tier 2, Bin 5 / ULEV2	120,000	1.68
VOLKSWAGEN	JETTA	2.0L	8AD XV02.0366	50 States	8ADXGPGNN366	Tier 2, Bin 5 / ULEV2	120,000	1.68
VOLKSWAGEN	PASSAT	2.0L	8AD XV02.0366	50 States	8ADXGPGNN366	Tier 2, Bin 5 / ULEV2	120,000	1.68
VOLKSWAGEN	PASSAT WAGON	2.0L	8AD XV02.0366	50 States	8ADXGPGNN366	Tier 2, Bin 5 / ULEV2	120,000	1.68
VOLKSWAGEN	NEW BEETLE	2.5L	8VWXV02.5253	50 States	8VWXGPGNN253	Tier 2, Bin 5 / ULEV2	120,000	1.74
VOLKSWAGEN	NEW BEETLE CONVERTIBLE	2.5L	8VWXV02.5253	50 States	8VWXGPGNN253	Tier 2, Bin 5 / ULEV2	120,000	1.74
VOLKSWAGEN	JETTA	2.5L	8VWXV02.5253	50 States	8VWXGPGNN253	Tier 2, Bin 5 / ULEV2	120,000	1.74
VOLKSWAGEN	RABBIT	2.5L	8VWXV02.5253	50 States	8VWXGPGNN253	Tier 2, Bin 5 / ULEV2	120,000	1.74
VOLKSWAGEN	JETTA SPORTWAGEN	2.5L	8VWXV02.5253	50 States	8VWXGPGNN253	Tier 2, Bin 5 / ULEV2	120,000	1.74
VOLKSWAGEN	NEW BEETLE	2.5L	8VWXV02.5257	50 States	8VWXGPGNN257	Tier 2, Bin 2 / SULEV2	120,000	1.72
VOLKSWAGEN	NEW BEETLE CONVERTIBLE	2.5L	8VWXV02.5257	50 States	8VWXGPGNN257	Tier 2, Bin 2 / SULEV2	120,000	1.72
VOLKSWAGEN	JETTA	2.5L	8VWXV02.5257	50 States	8VWXGPGNN257	Tier 2, Bin 2 / SULEV2	120,000	1.72
VOLKSWAGEN	JETTA SPORTWAGEN	2.5L	8VWXV02.5257	50 States	8VWXGPGNN257	Tier 2, Bin 2 / SULEV2	120,000	1.72
VOLKSWAGEN	RABBIT	2.5L	8VWXV02.5257	50 States	8VWXGPGNN257	Tier 2, Bin 2 / SULEV2	120,000	1.72
VOLKSWAGEN	EOS	3.2L	8VWXV03.2535	50 States	8VWXGPGNN253	Tier 2, Bin 5 / LEV2	120,000	1.74
VOLKSWAGEN	R32	3.2L	8VWXV03.2535	50 States	8VWXGPGNN253	Tier 2, Bin 5 / LEV2	120,000	1.74
VOLKSWAGEN	PASSAT / PASSAT 4MOTION	3.6L	8VWXV03.6246	50 States	8VWXGPGNN246	Tier 2, Bin 5 / LEV2	120,000	1.10
VOLKSWAGEN	PASSAT WAGON / PASSAT WAGON 4MOTION	3.6L	8VWXV03.6246	50 States	8VWXGPGNN246	Tier 2, Bin 5 / LEV2	120,000	1.10
LAMBORGHINI	GALLARDO Coupe / GALLARDO Spyder	5.0L	8NLXV05.0406	50 States	8NLXGPGNN406	Tier 2, Bin 5 / LEV2	120,000	1.00 (assigned DF)
LAMBORGHINI	MURCIELAGO / MURCIELAGO Roadster	6.5L	8NLXV06.5474	50 States	8NLXGPGNN474	Tier 2, Bin 5 / LEV2	120,000	1.00 (assigned DF)
BENTLEY	CONTINENTAL GT / GTC / Flying Spur	6.0L	8BEXV06.0501	50 States	8BEXGPGNN501	Tier 2, Bin 5 / LEV2	120,000	1.48
BENTLEY	ARNAGE / ARNAGE RL / AZURE	6.7L	8BEXV06.7TTC	50 States	8BEXGPGNN7TTC	Tier 2, Bin 5 / LEV2	120,000	1.00 (assigned DF)
BUGATTI	VEYRON	8.0L	8BGTV08.0V16	50 States	8BGTGPGNNV16	Tier 2, Bin 5 / LEV 2	120,000	1.00 (assigned DF)
VOLKSWAGEN	TOUAREG	3.6L	8VWXT03.6276	50 States	8VWXGPGNN276	Tier 2, Bin 5 / ULEV2	120,000	1.00
VOLKSWAGEN	TOUAREG	4.2L	8ADXT04.2358	50 States	8ADXGPGNN358	Tier 2, Bin 5 / LEV2	120,000	1.00
VOLKSWAGEN	TOUAREG	5.0L	8VWXT05.0375	Federal	8VWXDPDNN375	Tier 2, Bin 10	120,000	1.00

VOLVO								
Make	Model	Engine Displacement and Type	Test Group	Sales Area	Durability Group	Applicable Emission Standards	Applicable Full Useful Life (FUL) Mileage	Equivalency Factor (Alternative Cycle / EPA Standard Road Cycle)
VOLVO	S40/V50/C30 2.4i	2.4L In-line 4-cylinder	8V VXV02.4U2N	50 States	8V VXGPGNNNA2	Tier 2, Bin 5 / ULEV2	120,000	0.413
	S40	2.4L	8V VXV02.4S2N	California	8V VXGPGNNNA5	SULEV2	150,000	????
	S60 T5	2.4L In-line 4-cylinder turbo	8V VXV02.4L2T	50 States	8V VXGPGNNNTU1	????	120,000	0.413
	S60 2.5T S60 2.5T AWD S40/V50/C30/C70 T5 S40/V50 T5 AWD	2.5L In-line 5-cylinder turbo	8V VXB02.5U2T	50 States	8V VXGPGNNNTU1	????	120,000	0.413
	S80	3.0L V-6	8V VXV03.0U2T	50 States	8V VXGPGNNNTU3	Tier 2, Bin 5 / ULEV2	120,000	????
	XC 90	3.2L V-6	8V VXB03.2U2N	50 States	8V VXGPGNNNA4	Tier 2, Bin 5 / ULEV2	120,000	????
	XC90 (AWD) S80 (AWD)	4.4L V-8	8V VXB04.4U2N	50 States	8V VXGPGNNNA3	????	150,000	1.167



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL VEHICLE AND FUEL EMISSIONS LABORATORY
2565 PLYMOUTH ROAD
ANN ARBOR, MICHIGAN 48105-2498

OFFICE OF
AIR AND RADIATION

February 20, 2009

Mr. Leonard W. Kata
Manager, Emissions Regulation and Certification
Engineering and Environmental Office
Volkswagen of America, Inc.
3800 Hamlin Road
Auburn Hills, MI. 48326

Subject: Approval of the Carry-Over Request for Volkswagen's Model Year 2010
Alternative Durability Procedures

Dear Mr. Kata:

We received your letter dated January 30, 2009 requesting approval to carry-over Volkswagen's alternative whole vehicle and bench-aging durability procedures for the 2010 model year.

We have reviewed the attached package of materials you forwarded and deem that it is compliant with 40 CFR §86.1823-08(e). Therefore, we are approving your alternative whole vehicle and bench-aging durability procedure for the 2010 model year.

If you have questions or concerns regarding this approval, please contact Mr. Arvon L. Mitcham at (734) 214-4522 or Ms. Lynn Sohacki at (734) 214-4851. Thank you.

Respectfully,

Linc Wehrly, Manager
Light-Duty Vehicles Group

cc: Arvon L. Mitcham
Lynn Sohacki
U.S. EPA-OTAQ-CISD
10DUR-VWA-26654



Printed on Recycled Paper

To: Jim Snyder/AA/USEPA/US@EPA;Bruce Sdunek/AA/USEPA/US@EPA[]; ruce Sdunek/AA/USEPA/US@EPA[]
From: "Hart, Robert (VWoA)"
Sent: Thur 2/26/2009 7:33:54 PM
Subject: VW Group: Audi Field Fixes for MY 2000 thru 2002
CBI_YAD XV01.8332_APP_F01_R00.PDF
CBI_1AD XV01.8342_APP_F02_R00.PDF
CBI_2AD XV01.8342_APP_F18_R00.PDF
mailto:robert.hart@vw.com

Hello Jim and Bruce,

I'm not sure which one to send this to, so I'm sending it to both of you.

The attachments contain field fixes for model year 2000 through 2002 Audi test groups YAD XV01.8332, 1AD XV01.8342 and 2AD XV01.8342. The Verify system only goes back to model year 2003. This is the reason for this e-mail.

There are nine additional Audi field fixes uploaded to the Verify system.

If you have any questions regarding the attached information, please contact me as indicated below.

Best regards,

Bob Hart

Robert Hart

Emissions & Regulatory Analyst

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4224

Fax: 248 754 4207

mailto:robert.hart@vw.com

To: "Hart, Robert (VWoA)" [Robert.Hart@vw.com]
Cc: CN=Bruce Sdunek/OU=AA/O=USEPA/C=US@EPA[]
Bcc: []
From: CN=Jim Snyder/OU=AA/O=USEPA/C=US
Sent: Thur 2/26/2009 7:48:56 PM
Subject: Re: VW Group: Audi Field Fixes for MY 2000 thru 2002
[CBI YAD XV01.8332 APP F01 R00 .PDF](#)
[CBI 1AD XV01.8342 APP F02 R00 .PDF](#)
[CBI 2AD XV01.8342 APP F18 R00 .PDF](#)
<mailto:robert.hart@vw.com>

Thanks, I'll look them over.

Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

"Hart, Robert (VWoA)" <Robert.Hart@vw.com>
02/26/2009 02:33 PM
To Jim Snyder/AA/USEPA/US@EPA, Bruce Sdunek/AA/USEPA/US@EPA
cc
Subject VW Group: Audi Field Fixes for MY 2000 thru 2002

Hello Jim and Bruce,

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Best regards,
Bob Hart
Robert Hart
Emissions & Regulatory Analyst
Engineering and Environmental Office

Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326

Phone: 248 754 4224

Fax: 248 754 4207
mailto:robert.hart@vw.com

To: Jim Snyder/AA/USEPA/US@EPA[]
From: "Kata, Leonard"
Sent: Mon 3/2/2009 8:37:51 PM
Subject: Accepted: VW : Hybrid Vehicle Meeting Part 1 of possibly 2

To: Jim Snyder/AA/USEPA/US@EPA[]
From: "Kata, Leonard"
Sent: Mon 3/2/2009 8:37:59 PM
Subject: Accepted: VW : Hybrid Vehicle Meeting Part 2 of possibly 2

To: Jim Snyder/AA/USEPA/US@EPA[]
From: "Kohnen, Christoph (VWGoA)"
Sent: Wed 3/4/2009 1:56:09 PM
Subject: Accepted: VW : Hybrid Vehicle Meeting Part 1 of possibly 2

To: Jim Snyder/AA/USEPA/US@EPA[]
From: "Kohnen, Christoph (VWGoA)"
Sent: Wed 3/4/2009 1:56:19 PM
Subject: Accepted: VW : Hybrid Vehicle Meeting Part 2 of possibly 2

To: Jim Snyder/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;David Good/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Arvon Mitcham/AA/USEPA/US@EPA;Ted Trimble/AA/USEPA/US@EPA[]; hris Nevers/AA/USEPA/US@EPA;David Good/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Arvon Mitcham/AA/USEPA/US@EPA;Ted Trimble/AA/USEPA/US@EPA[]; avid Good/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Arvon Mitcham/AA/USEPA/US@EPA;Ted Trimble/AA/USEPA/US@EPA[]; inc Wehrly/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Arvon Mitcham/AA/USEPA/US@EPA;Ted Trimble/AA/USEPA/US@EPA[]; tephen Healy/AA/USEPA/US@EPA;Arvon Mitcham/AA/USEPA/US@EPA;Ted Trimble/AA/USEPA/US@EPA[]; rvon Mitcham/AA/USEPA/US@EPA;Ted Trimble/AA/USEPA/US@EPA[]; ed Trimble/AA/USEPA/US@EPA[]
Cc: "Krause, Norbert (VWoA)" [Norbert.Krause@vw.com]; christoph.kohnen@vw.com>;"Geisen, Anna (I/EA-523)" [anna.geisen@AUDI.DE]; Geisen, Anna (I/EA-523)" [anna.geisen@AUDI.DE]; Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Rech, Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]; Johnson, Stuart" [Stuart.Johnson@vw.com]
From: "Kata, Leonard"
Sent: Wed 3/4/2009 7:39:34 PM
Subject: Volkswagen/Audi
Agenda EPA Cert Final.ppt

To all:

A few days ago I distributed a draft agenda for our meetings scheduled for Thursday (5.MAR) and Friday (6.MAR) of this week. We have finalized the agenda and I am now providing the final version. The agenda includes a discussion of durability procedures and OBD, so I have added Arvon Mitcham and Ted Trimble to the distribution. They were not on the EPA meeting invitation, but I hope that they are able to participate.

We will be forwarding some material shortly, that presents a preview of the upcoming Volkswagen and Audi hybrid technology, for your reference.

We will try our best to cover the bulk of this material on Thursday afternoon.

Best regards,

Len

Leonard W. Kata
Manager
Emission Regulations and Certification
Engineering and Environmental Office

Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
Phone: (248) 754-4204
Cell: (248) 797-3886
FAX: (248) 754-4207
E-Mail: leonard.kata@vw.com

To: [Ex. 7]@vw.com]
Cc: []
Bcc: []
From: CN=Jim Snyder/OU=AA/O=USEPA/C=US
Sent: Wed 3/4/2009 10:50:59 PM
Subject: Re: Volkswagen/Audi

[Ex. 7] are planning to bring copies of the presentation or can you send it to us ahead of time? It would be nice to have handouts to look at and take notes on during the presentation.

I also invited Karl Paulina from the lab. He'll be interested in the parts about HEV testing .

Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

[Ex. 7]@vw.com>
03/04/2009 02:39 PM
To Jim Snyder/AA/USEPA/US@EPA, Chris Nevers/AA/USEPA/US@EPA, David Good/AA/USEPA/US@EPA, Linc Wehrly/AA/USEPA/US@EPA, Stephen Healy/AA/USEPA/US@EPA, Arvon Mitcham/AA/USEPA/US@EPA, Ted Trimble/AA/USEPA/US@EPA
cc [Ex. 7]@vw.com>, [Ex. 7]@vw.com>, [Ex. 7]
[Ex. 7]@AUDI.DE>, [Ex. 7]@volkswagen.de>,
[Ex. 7]@AUDI.DE>, [Ex. 7]@vw.com>
Subject Volkswagen/Audi

To all:

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Best regards,

[Ex. 7]

Ex. 7

Emission Regulations and Certification
Engineering and Environmental Office

Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326

Ex. 7

E-Mail: **Ex. 7**@vw.com

[attachment "Agenda EPA Cert_Final.ppt" deleted by Jim Snyder/AA/USEPA/US]

To: Jim Snyder/AA/USEPA/US@EPA[]
From: Ex. 7
Sent: Wed 3/4/2009 11:23:26 PM
Subject: RE: Volkswagen/Audi

Hi Jim:

Actually, I planned to do both. We just wrapped up our planning session here and I intend to send an electronic version. I still have to downsize it a bit, so it may be a little later tonight. I also plan to bring paper copies that you can use for note-taking.

Thanks for asking Karl to join.

See you tomorrow.

Ex. 7

Volkswagen Group of America, Inc.

Ex. 7

-----Original Message-----

From: Snyder.Jim@epamail.epa.gov [mailto:Snyder.Jim@epamail.epa.gov]
Sent: Wednesday, March 04, 2009 5:51 PM
To: Ex. 7
Subject: Re: Volkswagen/Audi

Ex. 7 are planning to bring copies of the presentation or can you send it to us ahead of time? It would be nice to have handouts to look at and take notes on during the presentation.

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Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division United States
Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

Ex. 7

To

Jim Snyder/AA/USEPA/US@EPA, Chris
03/04/2009 02:39 PM Nevers/AA/USEPA/US@EPA, David
Good/AA/USEPA/US@EPA, Linc
Wehrly/AA/USEPA/US@EPA, Stephen
Healy/AA/USEPA/US@EPA, Arvon
Mitcham/AA/USEPA/US@EPA, Ted
Trimble/AA/USEPA/US@EPA

cc

Ex. 7

Subject

Volkswagen/Audi

To all:

A few days ago I distributed a draft agenda for our meetings scheduled for Thursday (5.MAR) and Friday (6.MAR) of this week. We have finalized the agenda and I am now providing the final version. The agenda includes a discussion of durability procedures and OBD, so I have added Arvon Mitcham and Ted Trimble to the distribution. They were not on the EPA meeting invitation, but I hope that they are able to participate.

We will be forwarding some material shortly, that presents a preview of the upcoming Volkswagen and Audi hybrid technology, for your reference.

We will try our best to cover the bulk of this material on Thursday afternoon.

Best regards,

Ex. 7

Ex. 7

Volkswagen Group of America, Inc.

Ex. 7

[attachment "Agenda EPA Cert_Final.ppt" deleted by Jim Snyder/AA/USEPA/US]

To: Jim Snyder/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;David Good/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Arvon Mitcham/AA/USEPA/US@EPA;Ted Trimble/AA/USEPA/US@EPA;Carl Paulina/AA/USEPA/US@EPA[]; hris Nevers/AA/USEPA/US@EPA;David Good/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Arvon Mitcham/AA/USEPA/US@EPA;Ted Trimble/AA/USEPA/US@EPA;Carl Paulina/AA/USEPA/US@EPA[]; avid Good/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Arvon Mitcham/AA/USEPA/US@EPA;Ted Trimble/AA/USEPA/US@EPA;Carl Paulina/AA/USEPA/US@EPA[]; inc Wehrly/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Arvon Mitcham/AA/USEPA/US@EPA;Ted Trimble/AA/USEPA/US@EPA;Carl Paulina/AA/USEPA/US@EPA[]; tephen Healy/AA/USEPA/US@EPA;Arvon Mitcham/AA/USEPA/US@EPA;Ted Trimble/AA/USEPA/US@EPA;Carl Paulina/AA/USEPA/US@EPA[]; rvon Mitcham/AA/USEPA/US@EPA;Ted Trimble/AA/USEPA/US@EPA;Carl Paulina/AA/USEPA/US@EPA[]; ed Trimble/AA/USEPA/US@EPA;Carl Paulina/AA/USEPA/US@EPA[]; arl Paulina/AA/USEPA/US@EPA[]

Cc: Ex. 7

Ex. 7

From: Ex. 7

Sent: Thur 3/5/2009 3:34:08 AM

Subject: Volkswagen/Audi Presentation - 1 of 2

1 of 2

To all:

Attached are copies of the graphics that we intend to present during our meetings. There may be some slight variation in the order of presentation for the major topics.

Best regards,

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Cc: "Geisen, Anna (I/EA-523)" [anna.geisen@AUDI.DE]; N=Arvon Mitcham/OU=AA/O=USEPA/C=US@EPA;CN=Carl Paulina/OU=AA/O=USEPA/C=US@EPA;christoph.kohnen@vw.com;CN=David Good/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; N=Carl Paulina/OU=AA/O=USEPA/C=US@EPA;christoph.kohnen@vw.com;CN=David Good/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; hristoph.kohnen@vw.com;CN=David Good/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; N=David Good/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;"Rech, Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]; Rech, Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]; Krause, Norbert (VWoA)" [Norbert.Krause@vw.com]; N=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;"Johnson, Stuart" [Stuart.Johnson@vw.com]; Johnson, Stuart" [Stuart.Johnson@vw.com]; N=Ted Trimble/OU=AA/O=USEPA/C=US@EPA[]
From: CN=Chris Nevers/OU=AA/O=USEPA/C=US
Sent: Thur 3/5/2009 1:05:48 PM
Subject: Re: Volkswagen/Audi Presentation - 1 of 2

Please note that the attachment was not delivered. Zip files cannot make it through our network security named as .zip. In the future, please rename the file extension.

Regards,
Chris Nevers
734 214 4412

"Kata, Leonard" <Leonard.Kata@vw.com>
Sent by: "Kata, Leonard" <Leonard.Kata@vw.com>
Received Date:
03/04/2009 10:34 PM
Transmission Date:
03/04/2009 10:34:08 PM
To Jim Snyder/AA/USEPA/US@EPA, Chris Nevers/AA/USEPA/US@EPA, David Good/AA/USEPA/US@EPA, Linc Wehrly/AA/USEPA/US@EPA, Stephen Healy/AA/USEPA/US@EPA, Arvon Mitcham/AA/USEPA/US@EPA, Ted Trimble/AA/USEPA/US@EPA, Carl Paulina/AA/USEPA/US@EPA
cc "Krause, Norbert (VWoA)" <Norbert.Krause@vw.com>, <christoph.kohnen@vw.com>, "Geisen, Anna (I/EA-523)" <anna.geisen@AUDI.DE>, "Peter, Juergen (EASZ/1)" <juergen.peter@volkswagen.de>, "Rech, Lothar (I/EA-523)" <Lothar.Rech@AUDI.DE>, "Johnson, Stuart" <Stuart.Johnson@vw.com>
Subject Volkswagen/Audi Presentation - 1 of 2

1 of 2

To all:

Attached are copies of the graphics that we intend to present during our meetings. There may be some slight variation in the order of presentation for the major topics.

Best regards,

Len

Leonard W. Kata
Manager
Emission Regulations and Certification
Engineering and Environmental Office

Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
Phone: (248) 754-4204
Cell: (248) 797-3886
FAX: (248) 754-4207
E-Mail: leonard.kata@vw.com

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From: "Kata, Leonard"

Sent: Thur 3/5/2009 2:01:49 PM

Subject: VW/Audi Presentation March 5/6, 2009 ... 1 of 5
[EPA presentation sent final-Part1of2.pdf](#)

To all:

Have had trouble sending this information due to file size, I have broken the presentation into segments. Please see subject line for ordering the segments.

Best regards,

Len

Leonard W. Kata
Manager
Emission Regulations and Certification
Engineering and Environmental Office

Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
Phone: (248) 754-4204
Cell: (248) 797-3886
FAX: (248) 754-4207
E-Mail: leonard.kata@vw.com

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From: "Kata, Leonard"

Sent: Thur 3/5/2009 2:11:45 PM

Subject: VW/Audi Presentation March 5/6, 2009 ... 2 of 5
[EPA presentation sent final-Part2of2.pdf](#)

PART 2 of 5

Leonard W. Kata
Manager
Emission Regulations and Certification
Engineering and Environmental Office

Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
Phone: (248) 754-4204
Cell: (248) 797-3886
FAX: (248) 754-4207
E-Mail: leonard.kata@vw.com

To: Jim Snyder/AA/USEPA/US@EPA;Chris Nevers/AA/USEPA/US@EPA;David Good/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Arvon Mitcham/AA/USEPA/US@EPA;Ted Trimble/AA/USEPA/US@EPA;Carl Paulina/AA/USEPA/US@EPA[]; hris Nevers/AA/USEPA/US@EPA;David Good/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Arvon Mitcham/AA/USEPA/US@EPA;Ted Trimble/AA/USEPA/US@EPA;Carl Paulina/AA/USEPA/US@EPA[]; avid Good/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Arvon Mitcham/AA/USEPA/US@EPA;Ted Trimble/AA/USEPA/US@EPA;Carl Paulina/AA/USEPA/US@EPA[]; inc Wehrly/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;Arvon Mitcham/AA/USEPA/US@EPA;Ted Trimble/AA/USEPA/US@EPA;Carl Paulina/AA/USEPA/US@EPA[]; tephen Healy/AA/USEPA/US@EPA;Arvon Mitcham/AA/USEPA/US@EPA;Ted Trimble/AA/USEPA/US@EPA;Carl Paulina/AA/USEPA/US@EPA[]; rvon Mitcham/AA/USEPA/US@EPA;Ted Trimble/AA/USEPA/US@EPA;Carl Paulina/AA/USEPA/US@EPA[]; ed Trimble/AA/USEPA/US@EPA;Carl Paulina/AA/USEPA/US@EPA[]; arl Paulina/AA/USEPA/US@EPA[]

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From: "Kata, Leonard"

Sent: Thur 3/5/2009 2:13:06 PM

Subject: VW/Audi Presentation March 5/6, 2009 ... 3 of 5
[EPA CARB Certification Hybrid PH V3-Part1of2.pdf](#)

PART 3 OF 5

Leonard W. Kata
Manager
Emission Regulations and Certification
Engineering and Environmental Office

Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
Phone: (248) 754-4204
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From: "Kata, Leonard"

Sent: Thur 3/5/2009 2:15:11 PM

Subject: VW/Audi Presentation March 5/6, 2009 ... 4 of 5
[EPA CARB Certification Hybrid PH V3-Part2of2.pdf](#)

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Leonard W. Kata
Manager
Emission Regulations and Certification
Engineering and Environmental Office

Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
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Cc: Ex. 7

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From: Ex. 7

Sent: Thur 3/5/2009 2:17:14 PM

Subject: VW/Audi Presentation March 5/6, 2009 ... 5 of 5
[Bench Aging Procedure USA.pdf](#)

PART 5 of 5

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Reineman/OU=AA/O=USEPA/C=US@EPA;CN=Arvon
Mitcham/OU=AA/O=USEPA/C=US@EPA[]; N=Martin
Reineman/OU=AA/O=USEPA/C=US@EPA;CN=Arvon
Mitcham/OU=AA/O=USEPA/C=US@EPA[]; N=Arvon Mitcham/OU=AA/O=USEPA/C=US@EPA[]
Cc: []
Bcc: []
From: CN=Jim Snyder/OU=AA/O=USEPA/C=US
Sent: Fri 3/6/2009 1:58:11 PM
Subject: Reminder: VW mtg starts at 9:30 today not 9:00,,Room C126

Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

To: "Kata, Leonard" [Leonard.Kata@vw.com]
Cc: "Geisen, Anna (I/EA-523)" [anna.geisen@AUDI.DE]; N=Arvon Mitcham/OU=AA/O=USEPA/C=US@EPA;CN=Carl Paulina/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;christoph.kohnen@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; N=Carl Paulina/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;christoph.kohnen@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; N=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;christoph.kohnen@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;"Rech, Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]; Rech, Lothar (I/EA-523)" [Lothar.Rech@AUDI.DE]; Krause, Norbert (VWoA)" [Norbert.Krause@vw.com]; N=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;"Johnson, Stuart" [Stuart.Johnson@vw.com]; Johnson, Stuart" [Stuart.Johnson@vw.com]; N=Ted Trimble/OU=AA/O=USEPA/C=US@EPA[]
From: CN=David Good/OU=AA/O=USEPA/C=US
Sent: Fri 3/6/2009 5:02:21 PM
Subject: Re: VW/Audi Presentation March 5/6, 2009 - EPA Homework Item on Cold NMHC FELs
[MSAT Vehicle Provisions Summary FINAL RULE.508.pdf](#)

Len & all,

The provisions of 40 CFR 86.1864-10(m) require FELs to be rounded to one decimal place.

Attached is my summary of the MSAT regulations---if the summary does not agree with the regulations, of course, the regulations take precedence.

Regards

"Kata, Leonard" <Leonard.Kata@vw.com>

03/05/2009 09:13 AM

To Jim Snyder/AA/USEPA/US@EPA, Chris Nevers/AA/USEPA/US@EPA, David Good/AA/USEPA/US@EPA, Linc Wehrly/AA/USEPA/US@EPA, Stephen Healy/AA/USEPA/US@EPA, Arvon Mitcham/AA/USEPA/US@EPA, Ted Trimble/AA/USEPA/US@EPA, Carl Paulina/AA/USEPA/US@EPA
cc "Krause, Norbert (VWoA)" <Norbert.Krause@vw.com>, <christoph.kohnen@vw.com>, "Geisen, Anna (I/EA-523)" <anna.geisen@AUDI.DE>, "Peter, Juergen (EASZ/1)" <juergen.peter@volkswagen.de>, "Rech, Lothar (I/EA-523)" <Lothar.Rech@AUDI.DE>, "Johnson, Stuart" <Stuart.Johnson@vw.com>
Subject VW/Audi Presentation March 5/6, 2009 ... 3 of 5

PART 3 OF 5

Leonard W. Kata
Manager
Emission Regulations and Certification
Engineering and Environmental Office

Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
Phone: (248) 754-4204
Cell: (248) 797-3886
FAX: (248) 754-4207
E-Mail: leonard.kata@vw.com

**FINAL RULE:
CONTROL OF HAZARDOUS AIR POLLUTANTS
FROM MOBILE SOURCES**

February, 2007, revised 12/20/07, 5/13/08

Summary of Vehicle-Related Provisions

DRAFT SUMMARY – REGULATIONS TAKE PRECEDENCE

1. Cold Temperature Exhaust Emissions

Standard and Phase-in

Weight Category (GVWR)	Cert./In-Use Fleet Avg NMHC (g/mi)	Phase-In: Percentage of Vehicles by Model Year							
		2008	2009	2010	2011	2012	2013	2014	2015
LDVs & LLDTs ($\leq 6,000$ lbs)	0.3	Opt.	Opt.	25	50	75	100	100	100
HLDTs ($>6,000$ - $8,500$ lbs) & MDPVs ($>8,500$ - $10,000$ lbs)	0.5	NA	NA	Opt.	Opt.	25	50	75	100

Standard: 86.1811-09(a)(5), 86.1811-10(g)(2), 86.1864-10(a) and (e).

Phase-in: 86.1811-10(g)(2)(iii) and (g)(3), 86.1864-10(f).

Alternate Phase-In

Weight Category	Alternate Phase-In Equation
LDV/LLDT	$(6 \times \text{API}_{2008}) + (5 \times \text{API}_{2009}) + (4 \times \text{API}_{2010}) + (3 \times \text{API}_{2011}) + (2 \times \text{API}_{2012}) + (1 \times \text{API}_{2013}) \geq 500\%$, sum of first three products $\geq 100\%$ (i.e., “early year provision”)
HLDT/MDPV	$(6 \times \text{API}_{2010}) + (5 \times \text{API}_{2011}) + (4 \times \text{API}_{2012}) + (3 \times \text{API}_{2013}) + (2 \times \text{API}_{2014}) + (1 \times \text{API}_{2015}) \geq 500\%$, sum of first three products $\geq 100\%$ (i.e., “early year provision”) -or- $(6 \times \text{API}_{2010}) + (5 \times \text{API}_{2011}) + (4 \times \text{API}_{2012}) + (3 \times \text{API}_{2013}) + (2 \times \text{API}_{2014}) + (1 \times \text{API}_{2015}) \geq 600\%$, no early year provision

Alternative Phase-In: 86.1811-10(g)(4).

API = anticipated phase-in percentage for the referenced model year.

100% phase-in required by MY 2013 for LDV/LLDTs, MY 2015 for HLDT/MDPVs.

Interim In-use Standard = Test Group FEL + 0.1 g/mi

Model Year of Introduction	2008	2009	2010	2011	2012	2013	2014	2015
LDV/LLDT: Model year for which interim in-use standard applies	2008 2009 2010 2011	2009 2010 2011 2012	2010 2011 2012 2013	2011 2012 2013	2012 2013 2014	2013 2014		
HLDT/MDPV: Model year for which interim in-use standard applies			2010 2011 2012 2013	2011 2012 2013 2014	2012 2013 2014 2015	2013 2014 2015	2014 2015 2016	2015 2016

Interim In-use Standard: 86.1811-10(u), 86.1864-10(i).

Otherwise the in-use standard is the certification standard.

Standards apply for purposes of in-use testing only and do not apply to certification or Selective Enforcement Auditing.

Calculating Standard

Fleet-Average NMHC exhaust emissions	=	$\frac{(N \times \text{FEL})}{\text{Total \# vehicles sold}}$
---	---	---

Method: 86.1811-10(g)(2)(ii), 86.1864-10(m).

Computed at end of model year using actual sales.

N = The number of LDVs and LLDTs, or HLDTs and MDPVs, sold within the applicable FEL, based on vehicles counted to the point of first sale.

Total # vehicles sold = LDV + LLDTs, or HLDT + MDPVs

DRAFT SUMMARY – REGULATIONS TAKE PRECEDENCE

STANDARD

- Testing [86.1864-10(k)]: Cold carbon monoxide (CO) 20°F FTP test at either durability or test group level; alternative testing procedures may be used provided cold temperature NMHC emissions do not decrease; testing must be on a loaded vehicle weight (LVW) basis.
- Family Emission Limit (FEL) [86.1864-10(m)]: Mfr assigns FEL to all vehicles in durability or test group. One-decimal place FEL is standard for group for full useful life. No cap on FEL.
- Certification, Compliance, and Enforcement: 86.1811-10(g)(2)(iv); 86.1848-10; 86.1864-10(n) and (o).
- Full useful life [86.1805-04(g), 86.1811-10(g), 86.1864-10(b)]:
 - LDV/LLDT: 10 yrs or 120,000 miles, whichever comes first.
 - HLDT/MDPV: 11 yrs or 120,000 miles, whichever comes first.
- Intermediate Useful Life Standard [86.1811-10(g)(2)]: None.

DURABILITY AND VEHICLE DETERMINATION

- Durability Demonstration [86.1823-01(a)(3)(i)(C), 86.1864-10(j)]: A separate DF may be calculated exclusively using cold temperature NMHC test data to determine compliance with cold temperature NMHC emission standards. For determining compliance with full useful life cold NMHC emission standards, the 68-86 degree F 120,000 mile full useful life NMOG DF may be used.
- Test Group Determination [86.1827-01(a)(5)]: To be in the same test group, vehicles must be subject to the same emission standards (or FEL in the case of cold temperature NMHC standards), except that a mfr may request to group vehicles into the same test group as vehicles subject to more stringent standards, so long as all the vehicles within the test group are certified to the most stringent standards applicable to any vehicle within that test group.
- Emission Data Vehicle Selection [86.1864-10(l)]: For cold temperature NMHC exhaust emission compliance for each durability group, the vehicle expected to emit the highest NMHC emissions at 20 degrees F on candidate in-use vehicles shall be selected from the test vehicles. When the expected worst-case cold temperature NMHC vehicle is also the expected worst-case cold CO vehicle, then cold testing is required only for that vehicle; otherwise, testing is required for both the worst-case cold CO vehicle and the worst-case cold temperature NMHC vehicle [86.1828-10(g)]. EDV in each durability group shall be tested in accordance with the test procedures in subpart C of this part or with alternative procedures requested by the mfr and approved in advance by the Administrator [86.1829-01(b)(3)].

PHASE-IN COMPLIANCE

- Regular Phase-in Compliance [86.1811-10(g)(5) and (6)]: Mfrs must show compliance with required phase-in schedules by submitting information in Part I applications as required by §86.1844(d)(13). Sales percentages for determining phase-in compliance based upon projected 50-State sales; mfr may petition to allow actual volume produced to be used in lieu of projected sales.
- Alternate Phase-in Compliance [86.1811-10(g)(5)(ii)]: Mfr shows in certification application for the first year in which it intends to use such a schedule, and in each succeeding year during the phase-in, the intended phase-in percentages for that model year and the remaining phase-in years along with the intended final sum of those percentages. In its year end annual reports, mfr must include sufficient information so that the Administrator can verify compliance with the alternative phase-in schedule.

CREDIT PROGRAM

- Early Credits [86.1864-10(o)(5), 86.1811-10(g)(2)(iv)]: Mfrs may certify LDV/LLDTs for MY 2008-2009 in order to bank credits for use in MY 2010 and later; mfrs may certify HLDT/MDPVs for MY 2010-2011 in order to bank credits for use in MY 2012 and later; early HLDT/MDPV credits may not be applied to LDV/LLDTs before MY 2010; early LDV/LLDT credits may not be applied to HLDT/MDPV before MY 2012.
- Credit Use [86.1864-10(o)(7)]: Credits may be banked and used in a future MY in which a mfr's average exceeds standard, exchanged between the LDV/LLDT and HLDT/MDPV fleets of a given mfr, traded to another mfr; mfr must apply available credits to offset any deficits before trading or carrying over; credits not be permitted to address Selective Enforcement Auditing or in-use testing failures. Vehicles below the standard, and either introduced before phase-in begins or in excess of required phase-in percentage, may both generate credits and offset phase-in requirements.
- Credit Life [86.1864-10(o)(6)]: Credits are not subject to discount or expiration date except as required under the deficit carryforward provisions.

DRAFT SUMMARY – REGULATIONS TAKE PRECEDENCE

- Generating Credits [86.1864-10(o) and (o)(4)]: Credits may be generated prior, during, and after the phase-in period. Credits are earned on the last day of the model year using equation, rounded to the nearest tenth: Credits or Debits = (Cold Temperature NMHC Standard – Mfr's Sales-Weighted Fleet Avg Cold NMHC Emissions) × (Total Number of Vehicles Sold); where Total Number of Vehicles Sold = Total 50-State sales based on the point of first sale.
- Compliance [86.1864-10(o)(3)]: The averaging, banking and trading program shall be enforced through the certificate of conformity.
- Debits [86.1864-10(o)(8)]: mfr may carry deficit forward into the next model year only occur after mfr uses banked credits. At the end of that next model year, the deficit must be covered with an appropriate number of credits that the mfr generates or purchases. Any remaining deficit shall be subject to an enforcement action. Mfrs not permitted to run a deficit for two consecutive years

APPLICABILITY

- Fuel: gasoline-fueled LDV/LLDTs and HLDT/MDPVs; testing with other fuels (e.g., E85, diesel) not required; multi-fuel, bi-fuel or dual-fuel vehicles must comply with requirements using gasoline only [86.1811-10(g)(2)]. For any AECD uniquely used on multi-fuel vehicles when operated on fuels other than gasoline, EPA may request engineering emission data to quantify any emission impact and validity of the AECD [86.1844-01(d)(11), 86.1864-10(k)(3)].
- Altitude: Standards only apply at low altitude [86.1810-09(f)(1)], [86.1864-10(c)]; testing at high altitude not required; mfrs shall submit an engineering evaluation indicating that common calibration approaches are utilized at high altitudes. Any deviation from low altitude emission control practices shall be included in the auxiliary emission control device (AECD) descriptions submitted at certification. Any AECD specific to high altitude shall require engineering emission data for EPA evaluation to quantify any emission impact and validity of the AECD [86.1810-09(f)(2), 86.1844-01(d)(11), 86.1864-10(k)(3)].
- Conversion and ICIs [86.1864-10(a)]: Applies to aftermarket conversion systems as defined in 40 CFR 85.502, including conversion of MDPVs; vehicles imported by ICIs as defined in 40CFR 85.1502.

DRAFT SUMMARY – REGULATIONS TAKE PRECEDENCE

2. Evaporative Emissions

Evaporative Emission Standards (Grams of hydrocarbons per test) [86.1811-09(e)(1)]

Vehicle Category	Model Year	3-Day Diurnal Plus Hot Soak	Supplemental 2-Day Diurnal Plus Hot Soak
LDVs	2009	0.50	0.65
LLDTs	2009	0.65	0.85
HLDTs	2010	0.90	1.15
MDPVs	2010	1.00	1.25

STANDARD

- Standards equivalent to California's LEV II standards; would represent about 20-50% reduction (depending on vehicle weight class and type of test) in diurnal plus hot soak standards from the Tier 2 standards that will be in effect in the years immediately preceding the implementation of proposed standards.
- Standards apply both for certification and in-use [86.1811-09(a)(5), (e), (e)(1)].
- Useful life remains unchanged from Tier 2 evaporative requirements; (10 years/120,000 miles for LDVs, LLDTs and 11 years/120,000 miles for HLDTs, MDPVs; optionally 15 years/150,000 miles); ref. 86.1805-04(a) and (b).
- Interim In-use: Tier 2 evaporative emissions standards apply in-use for only the first three model years after an evaporative family is first certified:
 - LDV/LLDTs certified prior to the 2012 model year [86.1811-09(t)(1)].
 - HLDTs and MDPVs certified prior to the 2013 model year [86.1811-09(t)(2)].
- Multi-Fuel Vehicles: Standards apply to the non-gasoline portion of multi-fueled vehicles beginning in 2012 with a 3-year phase in of 30/60/100% based on a combined fleet of LDVs/LLDTs and HLDTs/MDPVs [86.1811-09(e)(1)(ii) and (iii)].

TIMING

- LDV/LLDT: 100% compliance in model year 2009; no phase-in period [86.1811-09(e)(1)].
- HLDT/MDPV: 100% compliance in model year 2010; no phase-in period [86.1811-09(e)(1)].

DIFFERENCES IN TIER 2 AND LEV II EVAPORATIVE EMISSION TEST REQUIREMENTS

Test Requirement	EPA Tier 2	California LEV II
Fuel volatility (Reid Vapor Pressure in psi):	9	7
Diurnal temperature cycle (degrees F):	72 to 96	65 to 105
Running loss test temperature (degrees F):	95	105

- Test Procedure & Test Fuel:** For low altitude 2-day & 3-day evaporative tests, manufacturers may use either the Federal test procedure (with 9RVP Indolene Tier 2 test fuel) or the California test procedure (7 RVP Phase II test fuel); ref. 86.1811-09(e)(7).
- Durability:** Tier 2 evaporative program requires mfrs to certify the durability of their evaporative emission systems using a fuel containing the maximum allowable concentration of alcohols (highest alcohol level allowed by EPA in the fuel on which the vehicle is intended to operate, i.e., a "worst case" test fuel). Under current requirements, this fuel would be about 10 percent ethanol by volume. (We are retaining these Tier 2 durability requirements for the proposed evaporative emissions program.) California does not require this provision.
- Hardware:** To compensate for the increased vulnerability of system components to alcohol fuel, mfrs have indicated that they will produce a more durable evaporative emission system than the Tier 2 numerical standards would imply, using the same low permeability hoses and low loss connections and seals planned for California LEV II vehicles.

APPLICABILITY

- Applies to gasoline-fueled, dedicated natural gas-fueled, dedicated liquefied petroleum gas-fueled, dedicated ethanol-fueled, dedicated methanol-fueled and multi-fueled vehicles. [86.1811-09(e)(1)].

DRAFT SUMMARY – REGULATIONS TAKE PRECEDENCE

3. Provisions for Small Volume Mfrs (inc. ICIs and AFVCs)

PROVISIONS

- Certification procedures. Covered in §86.1838-01 [86.1864-10(d)].
- Categories of businesses covered: small volume mfrs (SVMs), independent commercial importers (ICIs), and alternative fuel vehicle converters. For certification purposes, SVMs include ICIs and alternative fuel vehicle converters since they sell less than 15,000 vehicles per year.
- Phase-in flexibilities: Provided in §86.1811-04(k)(5)[86.1864-10(g)].
- Hardship provisions: SVMs may apply for up to an additional 2 years to meet the 100% phase-in requirements for cold NMHC [86.1811-04(q)(1)(viii) and (ix)] and the delayed requirement for evaporative emissions [86.1811-04(q)(1)(vi) and (vii), 86.1864-10(h)].

TIMING

- Cold temperature exhaust standards:
 - LDV/LLDTs: Exempt from phase-in requirements for MY 2010, 2011, and 2012, but must comply with the 100% requirement for MY 2013 and later [86.1811-04(k)(5)(vi)].
 - HLDT/MDPVs: Exempt from phase-in requirements for MY 2012, 2013, and 2014, but must comply with the 100% requirement for MY 2015 and later [86.1811-04(k)(5)(vii)]
- Evaporative emission standards:
 - LDV/LLDTs: Exempt for model years 2009 and 2010, but must comply with the Tier 2 evaporative emission standards for model years 2009 and 2010 [86.1811-04(k)(5)(iv)]. 100% compliance by model year 2011; no phase-in period.
 - HLDT/MDPVs: Exempt for model years 2010 and 2011, but must comply with the Tier 2 evaporative emission standards for model years 2010 and 2011 [86.1811-04(k)(5)(v)]. 100% compliance by model year 2012; no phase-in period.

SPECIAL PROVISIONS FOR INDEPENDENT COMMERCIAL IMPORTERS (ICIs)

- Timing/Phase-in: ICIs, which qualify as SVMs, are exempt from the cold temperature NMHC phase-in intermediate percentage requirements [85.1515 (c)(8)(iii)]. Nonconforming LDV/LLDTs originally manufactured in OP years 2010 and later must meet the cold temperature NMHC emission standards [85.1515(c)(8)(i)]. Nonconforming HLDTs and MDPVs originally manufactured in OP years 2012 and later must meet the cold temperature NMHC emission standards [85.1515(c)(8)(ii)].
- Evaporative Emissions:
 - Nonconforming LDV/LLDTs originally manufactured in OP years 2009 and later must meet the evaporative emission standards. However, LDV/LLDTs originally manufactured in OP years 2009 and 2010 and imported by ICIs who qualify as small SVMs are exempt from the LDV/LLDT evaporative emission standards, but must comply with the Tier 2 evaporative emission standards [85.1515 (c)(2)(vii)].
 - Nonconforming HLDTs and MDPVs originally manufactured in OP years 2010 and later must meet the evaporative emission standards. However, HLDTs and MDPVs originally manufactured in OP years 2010 and 2011 and imported by ICIs, who qualify as SVMs, are exempt from the HLDTs and MDPVs evaporative emission standards, but must comply with the Tier 2 evaporative emission standards [85.1515 (c)(2)(viii)].
- Credits, Averaging, Banking, and Trading:
 - ICIs may meet an FEL below the standards and bank or sell credits. An ICI may not meet a higher FEL than the fleet average standards, unless it demonstrates that it has obtained appropriate and sufficient NMHC credits. [85.1515 (c)(8)(iv)]
 - Where an ICI desires to obtain a certificate using a higher FEL, but does not have sufficient credits, the Administrator may issue such certificate if the ICI has also obtained a certificate of conformity for vehicles certified using a FEL lower than that required. The ICI may then import vehicles to the higher FEL only to the extent that it has generated sufficient credits from vehicles certified to a FEL lower than the fleet average standard during the same model year. [85.1515 (c)(8)(v)]
 - ICIs using FELs higher than the standards must monitor their imports so that they do not import more vehicles certified to such FELs than their available credits can cover. ICIs must not have a credit deficit at the end of a model year and are not permitted to use the deficit carryforward provisions. [85.1515 (c)(8)(vi)]

To: "Krause, Norbert (VWoA)" [Norbert.Krause@vw.com]
Cc: CN=Arvon Mitcham/OU=AA/O=USEPA/C=US@EPA;"Popa, Edward" [Edward.Popa@audi.com]; Popa, Edward" [Edward.Popa@audi.com]; N=Lynn Sohacki/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;"Johnson, Stuart" [Stuart.Johnson@vw.com]; N=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;"Johnson, Stuart" [Stuart.Johnson@vw.com]; Johnson, Stuart" [Stuart.Johnson@vw.com]; N=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]
From: CN=Tom Ball/OU=AA/O=USEPA/C=US
Sent: Mon 3/16/2009 9:03:01 PM
Subject: RE: 1.9L Diesels

Hello Norbert,

Can you tell me the status of the 2004 and 2006 models referenced in red below?

Tom

"Krause, Norbert (VWoA)" <Norbert.Krause@vw.com>
Sent by: "Krause, Norbert (VWoA)" <Norbert.Krause@vw.com>
Received Date:
12/22/2008 04:06 PM
Transmission Date:
12/22/2008 04:06:56 PM
To Tom Ball/AA/USEPA/US@EPA
cc Arvon Mitcham/AA/USEPA/US@EPA, "Popa, Edward" <Edward.Popa@audi.com>, Lynn Sohacki/AA/USEPA/US@EPA, Stephen Healy/AA/USEPA/US@EPA, "Johnson, Stuart" <Stuart.Johnson@vw.com>, Tom Anderson/AA/USEPA/US@EPA
Subject RE: 1.9L Diesels

Dear Tom:

Thank you for your reply.

You have tested one 2005 car with the old software and with the modified software. The results of the modified software showed that we passed all limits. I assume your decision is that we can go ahead with our activity to do a flash action in the field. As soon as we have done all the paperwork (i.e. dealer and customer letters) we will let you know.

Regarding the 2004 and 2006 model years we need to have a bit more time to finally decide on a similar action. We have to verify the modified software with some vehicles. I expect an outcome later in January 2009.

Thank you for your cooperation.

I wish you and your team a Merry Christmas and a Happy New Year.

Best regards,
Norbert

Norbert Krause
Director, Engineering and Environmental Office (EEO)
Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
United States of America
Phone +1-248-754-4201
Mobile +1-248-705-5626
FAX +1-248-754-4207
norbert.krause@vw.com

-----Original Message-----

From: Ball.Tom@epamail.epa.gov [mailto:Ball.Tom@epamail.epa.gov]
Sent: Freitag, 14. November 2008 09:56
To: Krause, Norbert (VWoA)
Cc: Mitcham.Arvon@epamail.epa.gov; Popa, Edward;
Sohacki.Lynn@epamail.epa.gov; Healy.Stephen@epamail.epa.gov; Johnson,
Stuart; Anderson.Tom@epamail.epa.gov
Subject: RE: 1.9L Diesels

Norbert,

Our position is that if the 2004 and 2006 vehicles are identical calibrations, we don't need any more test data. We would consider them in the same class as far as recall is concerned, and should be included in the recall. However, if there are differences in the calibrations as they relate to this problem, then we would like to see test data.

Tom

To: Tom Ball/AA/USEPA/US@EPA[]
Cc: Arvon Mitcham/AA/USEPA/US@EPA;"Popa, Edward" [Edward.Popa@audi.com];
Popa, Edward" [Edward.Popa@audi.com]; ynn Sohacki/AA/USEPA/US@EPA;Stephen
Healy/AA/USEPA/US@EPA;"Johnson, Stuart" [Stuart.Johnson@vw.com]; tephen
Healy/AA/USEPA/US@EPA;"Johnson, Stuart" [Stuart.Johnson@vw.com]; Johnson, Stuart"
[Stuart.Johnson@vw.com]; om Anderson/AA/USEPA/US@EPA[]
From: "Krause, Norbert (VWoA)"
Sent: Mon 3/16/2009 10:32:47 PM
Subject: RE: 1.9L Diesels

Hello Tom,

I will be travelling to Germany tomorrow and I hope, that I have an answer for you after my return end of March.

I apologize for the delay.

Best regards,
Norbert

Norbert Krause
Director, Engineering and Environmental Office (EEO)
Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
United States of America
Phone +1-248-754-4201
Mobile +1-248-705-5626
FAX +1-248-754-4207
norbert.krause@vw.com

-----Original Message-----

From: Ball.Tom@epamail.epa.gov [mailto:Ball.Tom@epamail.epa.gov]
Sent: Montag, 16. März 2009 17:03
To: Krause, Norbert (VWoA)
Cc: Mitcham.Arvon@epamail.epa.gov; Popa, Edward; Sohacki.Lynn@epamail.epa.gov;
Healy.Stephen@epamail.epa.gov; Johnson, Stuart; Anderson.Tom@epamail.epa.gov
Subject: RE: 1.9L Diesels

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Can you tell me the status of the 2004 and 2006 models referenced in red below?

Tom

"Krause, Norbert
(VWoA)"
<Norbert.Krause@

To

vw.com> Tom Ball/AA/USEPA/US@EPA
Sent by: cc
"Krause, Norbert Arvon Mitcham/AA/USEPA/US@EPA,
(VWoA)" "Popa, Edward"
<Norbert.Krause@ <Edward.Popa@audi.com>, Lynn
vw.com> Sohacki/AA/USEPA/US@EPA, Stephen
Healy/AA/USEPA/US@EPA, "Johnson,
Received Date: Stuart" <Stuart.Johnson@vw.com>,
12/22/2008 04:06 Tom Anderson/AA/USEPA/US@EPA
PM Subject
Transmission RE: 1.9L Diesels
Date:
12/22/2008
04:06:56 PM

Dear Tom:

Thank you for your reply.

You have tested one 2005 car with the old software and with the modified software. The results of the modified software showed that we passed all limits. I assume your decision is that we can go ahead with our activity to do a flash action in the field. As soon as we have done all the paperwork (i.e. dealer and customer letters) we will let you know.

Regarding the 2004 and 2006 model years we need to have a bit more time to finally decide on a similar action. We have to verify the modified software with some vehicles. I expect an outcome later in January 2009.

Thank you for your cooperation.

I wish you and your team a Merry Christmas and a Happy New Year.

Best regards,
Norbert

Norbert Krause
Director, Engineering and Environmental Office (EEO) Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
United States of America
Phone +1-248-754-4201
Mobile +1-248-705-5626
FAX +1-248-754-4207
norbert.krause@vw.com

-----Original Message-----

From: Ball.Tom@epamail.epa.gov [mailto:Ball.Tom@epamail.epa.gov]

Sent: Freitag, 14. November 2008 09:56

To: Krause, Norbert (VWoA)

Cc: Mitcham.Arvon@epamail.epa.gov; Popa, Edward; Sohacki.Lynn@epamail.epa.gov;

Healy.Stephen@epamail.epa.gov; Johnson, Stuart; Anderson.Tom@epamail.epa.gov

Subject: RE: 1.9L Diesels

Norbert,

Our position is that if the 2004 and 2006 vehicles are identical calibrations, we don't need any more test data. We would consider them in the same class as far as recall is concerned, and should be included in the recall. However, if there are differences in the calibrations as they relate to this problem, then we would like to see test data.

Tom

To: robert.hart@vw.com[]
Cc: []
Bcc: []
From: CN=Jim Snyder/OU=AA/O=USEPA/C=US
Sent: Thur 3/19/2009 8:28:23 PM
Subject: MY 2010 Lamborghini Test Group ANLXV06.5474

Bob, I looked this certificate request. So far it looks okay except for the fees. According to the filing form, it was just submitted 3/18/09, yesterday. If that's correct, it will take a while for it to show up in our "Fees Paid" records. I checked and didn't see it there yet.

Just wanted to warn you it may be a few days, or more, for this Certificate because of that.

Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

To: leonard.kata@vw.com[]
Cc: CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]
From: CN=David Good/OU=AA/O=USEPA/C=US
Sent: Thur 3/26/2009 8:13:43 PM
Subject: Car-Truck determination
[go--no-go gage regs-diag.pdf](#)

Len,

Per your 3/26/09 voicemail, we still measure the approach angle, departure angle, ground clearance, axle clearance and calculate the breakover angle for vehicles. We request that mfrs tell us about any new trucks in their cert preview meeting. Most mfrs will provide in the cert preview meeting the logic of why they believe any new trucks meet EPA's truck definition in 40 CFR 86.1803-01 (including the 5 measurements for approach angle, departure angle, running clearance, axle clearance and breakover angle).

With that said, EPA still measures to the point of any plastic spoilers, plastic fairings, etc. We still use the aluminum plate to measure the approach angle and departure angle.

For the past few years, I have been making sure I account for the rolling radius of the tire---which usually means that I snug the plate up to the tire, then make sure there is some extra clearance between the aluminum plate and the vehicle body to account for the rolling radius effect (typically 1/2 inch to 1-1/2 inch). It's not very scientific, so I consider it a spot check.

Attached is a diagram.

Give me a call if you have questions.

Regards

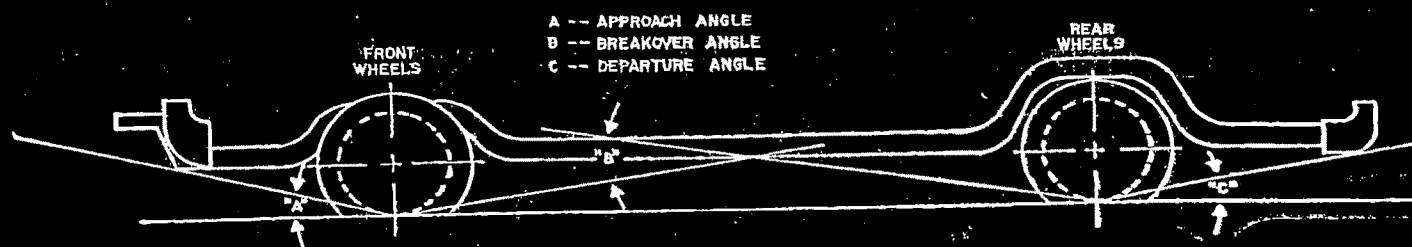


Fig. 1

[TR Doc. 76-97389 Filed 12-17-76; 8:46 am]

To: David Good/AA/USEPA/US@EPA[]
Cc: "Krause, Norbert (VWoA)" [Norbert.Krause@vw.com]; Kohnen, Christoph (VWGoA)" [christoph.kohnen@vw.com]; Kata, Leonard" [Leonard.Kata@vw.com]; obert Peavyhouse/AA/USEPA/US@EPA; Linc Wehrly/AA/USEPA/US@EPA[]; inc Wehrly/AA/USEPA/US@EPA[]
From: "Thomas, Richard"
Sent: Wed 4/1/2009 1:56:42 PM
Subject: 2008 Volkswagen Group PC Final CAFE letter
[CBI_8VWX_COMMON_CAFE_LDV_R00.pdf](#)

Hello Dave;

As we have discussed on the phone previously, I have attached the cover letter with our Volkswagen Group 2008 Passenger Car Final CAFE. I understand that the Verify system will be modified to include a category for such cover letters in the future. I will enter them into the system using Verify once this is accomplished. If you have any questions, please contact me directly.

Best regards,
Richard E. Thomas
VOLKSWAGEN GROUP OF AMERICA, INC.
3800 Hamlin Road
Auburn Hills, MI 48326
Engineering and Environmental Office (EEO)
Phone: 248 754-4213
Fax: 248 754-4207
Richard.Thomas@VW.com

VOLKSWAGEN

GROUP OF AMERICA

Mr. Linc Wehrly
Compliance and Innovative Strategies Division
Light-Duty Vehicle Group
U.S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, Michigan 48105

Norbert Krause Name
Director Title
EEO Department
248 754 4201 Phone
248 754 4207 Fax
Norbert.Krause@vw.com E-Mail

March 31, 2009 Date

Subject: Volkswagen Group 2008 Final CAFE Report

VOLKSWAGEN GROUP OF AMERICA, INC.
3800 HAMLIN ROAD
AUBURN HILLS, MI 48326
PHONE +1 248 754 5000

Dear Mr. Wehrly;

Enclosed is the manufacturer's calculation for the 2008 final fuel economy average. This calculation is provided for the Volkswagen Import Passenger Car category and in accordance to the regulations contained in 40 CFR 600.510-93. The final CAFE value is based upon approved EPA fuel economy data and final production volumes for the 2008 model year vehicles. The report has successfully been processed using the CFEIS system and submitted through Verify. The final Import Passenger Car CAFE value adjusted is **29.1 MPG**.

The attachments to this letter contain the domestic content calculation as requested in the EPA certification mail-out CD-92-06. The Volkswagen Group of America, Inc. procedure for this calculation follows the procedure outlined in 40 CFR 600.511-80. Our procedure is described as follows:

- For vehicles produced outside of the NAFTA territory, the "declared value" of foreign components is basically, the ex factory value of each of the models which we have imported. The freight and insurance is added to this value and is labeled as "adjusted import value". The value of U.S. components has not been excluded because this value is included in the declared value upon importation of the vehicles. The "cost of production" as defined in the regulations equates to our wholesale price to the dealer.
- For vehicles produced within the NAFTA territory (Mexico), we followed the procedure established according to NAFTA Appendix 300-A.3, where Paragraph 1 states:

"For purposes of the Energy Policy and Conservation Act of 1975, 42 U.S.C. 6201...the United States shall consider an automobile to be domestically manufactured in any model year if at least 75 percent of the cost to the manufacturer of such automobile is attributable to value added in Canada, Mexico or the United

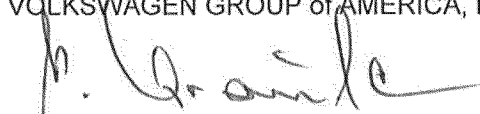
States...Paragraph 1 shall apply beginning with the next model year after January 1, 2004, where the enterprise subject to the fuel economy requirements for those automobiles under the CAFE Act, has not made an election under subparagraph a)."

For purposes of paragraph 1, and according to 40 CFR 600.511-80, the ratio obtained in the domestic production determination was obtained from dividing the sum of the declared value (as defined in §600.502) of all of the imported components installed or included on automobiles produced within such a car line within a given model year plus the cost of transportation and insuring such components to the United States Port of entry, by the cost of production (as defined in §600.52) of all automobiles within such a car line.

The calculated results for each model are listed in the right column entitled CAFE Ratio. These values are clearly greater than the 0.25 ratio and therefore all Volkswagen Group models are determined to be in the Import category.

If you have any questions or require additional information, please contact me or Mr. Richard Thomas at (248) 754-4213.

Sincerely,
VOLKSWAGEN GROUP of AMERICA, Inc.



Norbert Krause
Director
Engineering and Environmental Office

attachments

2008 FINAL CAFE-LDV
VOLKSWAGEN GROUP
MANUFACTURER AVERAGE CALCULATION

Calculate fuel economy average of domestically and non-domestically produced automobiles where:

$$\text{Import Average IAFE} = \frac{\text{TIPA}}{n} = 28.9 \text{ MPG (unadjusted)}$$

$$\sum_{\text{MT}=1} \frac{\text{IMT}}{\text{FEMT}}$$

IAFE	Average fuel economy of non-domestically produced automobiles.
TIPA	Total number of passenger automobiles produced or imported for sale in the United States.
IMT	Number of passenger automobiles of a model type produced or imported.
FEMT	Fuel economy, MPG for a model type.
MT	Model type
n	Total number of model types imported (as applicable in a manufacturer's model year).

$$\text{IAFE (unadjusted)} = \frac{291,483}{10075.3632} = 28.9303 \text{ MPG}$$

$$\text{IAFE (adjusted)} = 29.1 \text{ MPG}$$

VOLKSWAGEN GROUP OF AMERICA, INC.
DOMESTIC CONTENT CALCULATION FOR 2008 FINAL CAFE

<u>AUDI</u>	<u>MSRP</u>	<u>Import Value</u>	<u>Ocean Freight</u>	<u>Insurance</u>	<u>Adjusted Import Value</u>	<u>Wholesale Price</u>	<u>CAFE Ratio</u>
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Ex. 4 - CBI

VOLKSWAGEN GROUP OF AMERICA, INC.
DOMESTIC CONTENT CALCULATION FOR 2008

VOLKSWAGEN

<u>Factory</u> <u>Price</u>	<u>Freight</u>	<u>Insurance</u>	<u>Adjusted</u> <u>Import</u> <u>Value</u>	<u>Wholesale</u> <u>Price</u>	<u>CAFE</u> <u>Ratio</u>
--------------------------------	----------------	------------------	--	----------------------------------	-----------------------------

Ex. 4 - CBI

VOLKSWAGEN GROUP OF AMERICA, INC.
DOMESTIC CONTENT CALCULATION FOR 2008

BENTLEY

Transfer Price

Wholesale Price

%

Ex. 4 - CBI

To: Jim Snyder/AA/USEPA/US@EPA[]
Cc: "Kolesa, Konrad, Dr. (I/EA-52)" [Konrad.Kolesa@AUDI.DE]; Hart, Robert (VWoA)" [Robert.Hart@vw.com]
From: "Thomas, Richard"
Sent: Thur 4/2/2009 7:10:53 PM
Subject: Volkswagen group Electronic Fund Transfer Log
[20090402150346138.pdf](#)

Hello Jim;

Here is the print out from our Volkswagen Accounts Payable group in Ajax, Canada where it shows that the transfer will take place tomorrow April 3, 2009. It lists each of the test groups which the payment covers. I mailed the Certification Fee Filing Form to Lt. Louis for the first five test groups on March 19, 2009 and the last ten test groups on April 1, 2009. That was April fools day so I hope it makes it. If anyone has any questions they may contact me directly.

Thanks and best regards,
Richard E. Thomas
VOLKSWAGEN GROUP OF AMERICA, INC.
3800 Hamlin Road
Auburn Hills, MI 48326
Engineering and Environmental Office (EEO)
Phone: 248 754-4213
Fax: 248 754-4207
Richard.Thomas@VW.com

To: Willem VandenBroek/AA/USEPA/US@EPA[]
Cc: "Kohnen, Christoph (VWGoA)" [christoph.kohnen@vw.com]; im Snyder/AA/USEPA/US@EPA[]
From: "Thomas, Richard"
Sent: Fri 4/3/2009 3:18:51 PM
Subject: RE: Cert Fee Issues #351 and 352
[20090402150346138.pdf](#)

Hello Bill;

I sent the attached e-mail to Jim Snyder yesterday, I hope he sent it to you before he left. I know he is not in the office today. Bottom line, all Volkswagen Group brands, Volkswagen, Audi, Bentley, Lamborghini and Bugatti are paid from our Volkswagen finance department electronically. The fee filing forms for all 15 test groups covered with today's payment were mailed to St. Louis on two separate dates, March 19 and April 1, 2009. If there are any further questions, please feel free to contact me directly.

Best regards,
Richard E. Thomas
VOLKSWAGEN GROUP OF AMERICA, INC.
3800 Hamlin Road
Auburn Hills, MI 48326
Engineering and Environmental Office (EEO)
Phone: 248 754-4213
Fax: 248 754-4207
Richard.Thomas@VW.com

-----Original Message-----

From: VandenBroek.Willem@epamail.epa.gov
[mailto:VandenBroek.Willem@epamail.epa.gov]
Sent: Friday, April 03, 2009 10:38 AM
To: Thomas, Richard
Subject: Fw: Cert Fee Issues #351 and 352

Richard:

Following up on our conversation, I will process this as indicated below unless you say otherwise. Note that the audi can't be listed as paid until the fees process has received the fee filing form.

Bill

----- Forwarded by Willem VandenBroek/AA/USEPA/US on 04/03/2009 10:37 AM -----

"Ventre, Adam
M."

<adamventre@PQA. To
com> Willem
Sent by: VandenBroek/AA/USEPA/US@EPA
"Ventre, Adam cc
M." "Burke, Chaffee"
<adamventre@PQA. <chaffeeburke@pqa.com>
com> Subject
Cert Fee Issues #351 and 352
Received Date:
04/03/2009 10:17
AM
Transmission
Date:
04/03/2009
10:17:50 AM

Bill-

We received an ACH payment for \$514,845 via Cashlink today. This is a Volkswagen payment that lists an Audi engine family names (AADXJ03.23UC) under Payment Related Information. We have not yet received FFF's for the Audi engine indicated on the payment. However, it appears that this payment could potentially resolve Cert Fee Issues #351 and #352 (Engine families: AVWXV02.5259, AVWXV02.5257, AVWXV02.5253, AVWXV02.5U35, and AADXV05.2LR8). Resolving these issues would account for \$171,615 of the payment. The remaining \$343,230 would be listed as a Payment no FFF issue. Please let us know if you would like us to handle this differently.

Thanks!

Adam Ventre
Perrin Quarles Associates, Inc.
(434) 979-3700 x 176

Subject: Volkswagen group Electronic Fund Transfer Log
Date: Thu, 2 Apr 2009 15:10:53 -0400
Message-ID: <A8A2B485FAC02340A4BF5F5129D1FE5113656A38@VWOOAHSXH001.vwoa.na.vwg>
From: "Thomas, Richard" <Richard.Thomas@vw.com>
To: <snyder.jim@epa.gov>
Cc: "Kolesa, Konrad, Dr. (I/EA-52)" <Konrad.Kolesa@AUDI.DE>, "Hart, Robert (VWoA)" <Robert.Hart@vw.com>
Content-Type: multipart/mixed; boundary="----=_NextPart_002_01C9B3C6.BE14813F"
X-MimeOLE: Produced By Microsoft Exchange V6.5
Content-class: urn:content-classes:message
MIME-Version: 1.0
X-MS-Has-Attach: yes
X-MS-TNEF-Correlator:

Thread-Topic: Volkswagen group Electronic Fund Transfer Log
Thread-Index: AcmxZePN09/dhDKTT+7EN0qq8fwXwAABNVA

Hello Jim;

Here is the print out from our Volkswagen Accounts Payable group in Ajax, Canada where it shows that the transfer will take place tomorrow April 3, 2009. It lists each of the test groups which the payment covers. I mailed the Certification Fee Filing Form to Lt. Louis for the first five test groups on March 19, 2009 and the last ten test groups on April 1, 2009. That was April fools day so I hope it makes it. If anyone has any questions they may contact me directly.

Thanks and best regards,
Richard E. Thomas
VOLKSWAGEN GROUP OF AMERICA, INC.
3800 Hamlin Road
Auburn Hills, MI 48326
Engineering and Environmental Office (EEO)
Phone: 248 754-4213
Fax: 248 754-4207
Richard.Thomas@VW.com

To: Linc Wehrly/AA/USEPA/US@EPA;David Good/AA/USEPA/US@EPA;Jim Snyder/AA/USEPA/US@EPA[]; David Good/AA/USEPA/US@EPA;Jim Snyder/AA/USEPA/US@EPA[]; im Snyder/AA/USEPA/US@EPA[]
From: Ex. 7
Sent: Fri 4/10/2009 1:34:08 PM
Subject: Hybrid Warranty and Maintenance

To all:

FYI.

As a follow-up to our 2-day meeting last month regarding future HEV certification, I have submitted a document, through the VERIFY system, requesting review of the VW proposed HEV warranty coverage and maintenance intervals.

Best regards,

Ex. 7

Volkswagen Group of America, Inc.

Ex. 7

To: mike.hennard@vw.com[]
Cc: CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Tom Ball/OU=AA/O=USEPA/C=US@EPA;CN=Ross Ruske/OU=DC/O=USEPA/C=US@EPA[];
N=Tom Ball/OU=AA/O=USEPA/C=US@EPA;CN=Ross Ruske/OU=DC/O=USEPA/C=US@EPA[]; N=Ross Ruske/OU=DC/O=USEPA/C=US@EPA[]
From: CN=David Good/OU=AA/O=USEPA/C=US
Sent: Wed 4/15/2009 9:26:50 PM
Subject: Re: VW 2586 Recall Report - What 2003 models are covered?
[Volkswagen 2586 Recall Report.pdf](#)

Mike,

The 2003 certificate for test group 3VWXV02.0223 covers Golf, Jetta, Jetta Wagon, New Beetle and New Beetle Convertible models. The certif was originally issued 4/25/02 and revised on 9/5/02, adding New Beetle Convertible models.

Do you know why the attached voluntary recall/ warranty extension to 100K only applies to 2003 New Beetle Convertible models? It looks like a typo and it should actually cover 2003 Golf, Jetta, Jetta Wagon, New Beetle and New Beetle Convertible models.

Please advise.

Thanks

VW 2586 Recall Report

Michael Stephens to: David Good, Ross Ruske 04/15/2009 04:33 PM

Dave,

Attached is the scanned file of the VW Catalytic Converter extended warranty Recall Report. It clearly shows that for 2003 it included only the New Beetle Convertible and not the Jetta.

Sincerely,
Michael Stephens
EG&G Technical Services, Inc.
E-mail: stephens.michael@epa.gov
Phone: 734-214-4879
Fax: 734-214-4676

VOLKSWAGEN of America, Inc.

EPA 2586

RECEIVED

NOV 14 2007

VPCD

EDIR / VERR Coordinator
Vehicle Program Group
Compliance and Innovation Strategies Division
U.S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, Michigan 48105

November 09, 2007 Date

Subject: VERR - Catalytic Converter Warranty Extension with Customer Notification

Reference: EPA Defect Report – 2007/11/09

Volkswagen of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
Phone +1 248 754 5000
Fax +1 248 754 4930

Dear Sir,

This information is submitted in accordance with the requirements of Part 85. 1904 –title 40 of the Code of Federal Regulations:

1) Description of Recalled Vehicles

Not applicable.

Description of vehicles involved in Warranty Extension program is as follows:

<u>Model Year</u>	<u>Make</u>	<u>Model</u>	<u>Engine Family</u>
2001	VW	Golf; Jetta; NB	1VWXV02.0223 ✕
		Golf; Jetta; NB	1VWXV02.0226 ✕
2002	VW	Golf; Jetta; NB	2VWXV02.0223 ✕
		Golf; Jetta; NB	2VWXV02.0222 ✕
2003	VW	NB Convertible	3VWXV02.0223 ✕
<u>Total Vehicle Populations:</u>		USA:	340,239
		Canada:	40,419

2) **A Description of the Corrective Action to be made**

Volkswagen of America, Inc. has initiated an extended warranty program for 10 years / 100,000 miles relating to catalytic converter replacements. All authorized Volkswagen dealers have been notified of this action, and owners of affected vehicles have received a notification letter that includes all needed information regarding this issue.

Dealer Notification: On or about August 27th, 2007.

Customer Notification: On or about August 29th, 2007.

Part numbers involved: 1J0 254 502T / 1J0 254 503 / 1J0 254503X

3) **A Description of the Method Used to Obtain Owner's Name and Addresses**

The R.L. Polk Recall Service is used to obtain state motor vehicle registration data as a source for customer name and address information.

4) **Description of Proper Maintenance or Eligibility Required of the Remedial Plan**

All subject vehicles will be inspected and Volkswagen of America warranty records will be reviewed by the servicing Volkswagen dealer to determine if the customer's vehicle meets the parameters of the subject warranty extension program.

5) **Description of the Remedial Procedure Including Earliest Repair Date, Remedial Time Requirement and Designated Repair Facility**

Affected authorized Volkswagen dealers have received notification and detailed repair instructions on or about August 27th, 2007.

6) **Remedial Plan by Other than Authorized Dealer**

It is anticipated that all affected vehicles will be remedied by authorized dealers of the manufacturer.

7) **Submission of Owner's Notification Letter**

Enclosed are three examples of the owner's notification letter.

8) **Description of the System Insuring Sufficient Parts**

Affected authorized Volkswagen dealers will be supplied with a sufficient quantity of parts to replace the subject Catalytic Converter through the normal Volkswagen of America parts system.

9) **Submission of Dealer Circular**

See paragraph 5

10) **A Description of Fuel Consumption or Drivability Impact**

There is no affect on fuel consumption or drivability.

11) **Sample of Label Identifying a Completed Vehicle**
(California Dealers only)

Not applicable.

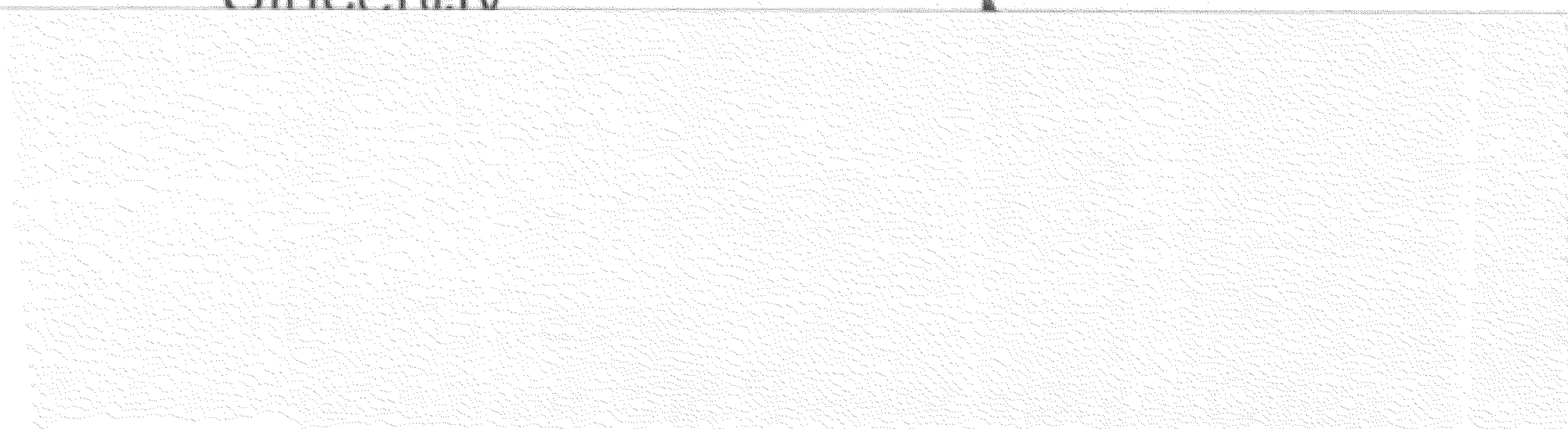
12) **Manufacturer's Recall Code**

There is no recall code regarding this Warranty Extension.

The Warranty Extension is identified as follows:

VW: Z1 (Warranty Extension)

Sincerely,

A large rectangular area of the document is redacted with a grey, textured pattern, obscuring the signature and any text that might have been present below the "Sincerely," line.

Attachments– 4

Cc: Tony Rinaldi – Environment Canada

To: David Good/AA/USEPA/US@EPA[]
Cc: Jim Snyder/AA/USEPA/US@EPA;Tom Ball/AA/USEPA/US@EPA;Ross Ruske/DC/USEPA/US@EPA[]; om Ball/AA/USEPA/US@EPA;Ross Ruske/DC/USEPA/US@EPA[]; oss Ruske/DC/USEPA/US@EPA[]
From: "Hennard, Mike"
Sent: Thur 4/16/2009 12:51:54 PM
Subject: RE: VW 2586 Recall Report - What 2003 models are covered?

Hello David:

I researched your question and found the following details regarding test group 3VWXV02.0223:

The Volkswagen Warranty Extension for catalytic converters does indeed cover all model vehicles in this 3VWXV02.0223 test group. The vehicles are divided into two distinct engine types, "AHV" for models Golf, Jetta, New Beetle (sedan) and engine type "BDC" which distinctly for the New Beetle Convertible.

I checked the VW Service Circular and the VW dealers were given this correct information. The VERR report submitted to EPA on November 09, 2007 only included the New Beetle Convertible as you stated. I will have the VERR corrected and re-submit VERR report to you immediately to assure EPA records are correct.

Thanks for finding this discrepancy.

Mike Hennard
VWGoA - EEO

-----Original Message-----

From: Good.David@epamail.epa.gov [mailto:Good.David@epamail.epa.gov]
Sent: Wednesday, April 15, 2009 5:27 PM
To: Hennard, Mike
Cc: Snyder.Jim@epamail.epa.gov; Ball.Tom@epamail.epa.gov;
Ruske.Ross@epamail.epa.gov
Subject: Re: VW 2586 Recall Report - What 2003 models are covered?

Mike,

The 2003 certificate for test group 3VWXV02.0223 covers Golf, Jetta, Jetta Wagon, New Beetle and New Beetle Convertible models. The certif was originally issued 4/25/02 and revised on 9/5/02, adding New Beetle Convertible models.

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Please advise.

Thanks

VW 2586 Recall Report

Michael Stephens

to:

David Good, Ross Ruske

04/15/2009 04:33 PM

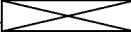
Dave,
Attached is the scanned file of the VW Catalytic Converter extended warranty Recall Report. It clearly shows that for 2003 it included only the New Beetle Convertible and not the Jetta.

(See attached file: Volkswagen 2586 Recall Report.pdf)

Sincerely,
Michael Stephens
EG&G Technical Services, Inc.
E-mail: stephens.michael@epa.gov
Phone: 734-214-4879
Fax: 734-214-4676

To: "Popa, Edward" [Edward.Popa@audi.com]
Cc: "Kohnen, Christoph (VWGoA)" [christoph.kohnen@vw.com]; Kata, Leonard" [Leonard.Kata@vw.com]; Krause, Norbert (VWoA)" [Norbert.Krause@vw.com]; Johnson, Stuart" [Stuart.Johnson@vw.com]; N=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;CN=Tom Ball/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Lynn Sohacki/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]; N=Tom Ball/OU=AA/O=USEPA/C=US@EPA;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Lynn Sohacki/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Lynn Sohacki/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Lynn Sohacki/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]; N=Lynn Sohacki/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]
From: CN=David Good/OU=AA/O=USEPA/C=US
Sent: Fri 4/17/2009 8:53:32 PM
Subject: Re: IUVP-MY2007 Additional Testing for Test Group 7ADXT04.2358 - EPA & CARB agree that no additional low mileage testing is necessary
<mailto:edward.popa@audi.com>
<http://www.vw.com>
<http://www.audiusa.com>

Edy,

I talked to  at CARB and EPA and ARB agree that no further IUVP low mileage testing is necessary for vehicles in this test group (and that with the additional test vehicles, the test group doesn't qualify for IUCP testing).

Thanks for testing the vehicles so promptly and entering the data in Verify.

As a reminder:

In the future when a test group qualifies for IUCP testing, the regulations require VW/Audi to notify EPA and ARB, to send EPA/ARB a test plan for approval prior to beginning the IUCP testing, to begin the IUCP testing within 3 months of the time when the IUVP testing is completed for the test group and to finish IUCP testing within 7 months of the time when the IUVP testing is completed for the test group; ref 40 CFR 86.1846-01(g) and (i).

Regards

IUVP-MY2007 Additional Testing for Test Group 7ADXT04.2358

Popa, Edward to: David Good 04/01/2009 02:10 PM

Cc: "Krause, Norbert (VWoA)", "Johnson, Stuart", "Kata, Leonard", "Kohnen, Christoph (VWGoA)"

Hello Dave,

The third vehicle for the test group 7ADXT04.2358 has been successfully tested.
Results have been reported through the Verify-System.

The VIN# of the third vehicle is:

Ex. 6

With the completion of this testing we have satisfied the agreement to test three additional vehicles for the above mentioned test group.

I would appreciate your confirmation of receipt of all test data, as well as completion of the IUVP-Testing-Requirements for this test group.

Thank for your support,
Edy

Edward-Fabian Popa
Manager In-Use Emission Compliance
Volkswagen Group of America, Inc.
Engineering and Environmental Office
3800 Hamlin Road
Auburn Hills, MI 48326, U.S.A.
Tel. +1 248 754 4211
Mobile: +1 248 881 4095
Fax: +1 248 754 4207
mailto:edward.popa@audi.com
<http://www.vw.com>
<http://www.audiusa.com>

To: Lynn Sohacki/AA/USEPA/US@EPA[]
Cc: "Johnson, Stuart" [Stuart.Johnson@vw.com]; Krause, Norbert (VWoA)" [Norbert.Krause@vw.com]; Kohnen, Christoph (VWGoA)" [christoph.kohnen@vw.com]; Reineke, Dennis" [Dennis.Reineke@vw.com]
From: "Papa, Edward"
Sent: Thur 4/23/2009 7:47:45 PM
Subject: RE: In-use vehicles scheduled for next week
[In-Use Parameters Form.xls](#)
[fuel_drain.pdf](#)

Hello Lynn,

Please find below the test information and parameters for the upcoming EPA In-Use Surveillance Test Program -Eng. Fam. 6VWXXV01.9238 and for the vehicle M149RXX-0038 (2006 VW/Jetta):

Lab: NVFEL Ann Arbor,
Michigan
Engine Family: 6VWXXV01.9238
Estimated Start Date: Week-ending May 8, 2008
Recall/Testing Representative: Lynn Sohacki
Telephone Number: (734) 214-4851
E-mail address: Sohacki.Lynn@epa.gov
Class Numbers: M148/M149 (low-mileage /
high-mileage)

- General Test Group Information:

Engine Fam.: 6VWXXV01.9238
Concept: 1.9L / I4 (TDI-PD)
Em. Standard: InT2 - BIN 10
Sales Area: 50 States / Canada
Engine HP: 100 hp
Engine Code: BRM
Models in TG: Jetta
EVAP Fam.: n/a
EVAP Standard: n/a
of sold vehicles in TG: 38,221

- General Vehicle Group Information:

Tank Capacity 100% [l] 55 [l]
Tank Capacity 40% [l] 22 [l]
Tank Capacity 100% [gal] 14.53 [gal]
Tank Capacity 40% [gal] 5.81 [gal]
Canister Working Cap. [g] n/a [g]
Standard Tire Size 205/55 R16
Axle Ratio 3.389 - Manual / 3.333-
Automatic
Target road-load coef. 30.12 (F0) 0.1954 (F1)
0.0186 (F2) - Manual
35.07 (F0)
0.1809 (F1) 0.0193 (F2) - Automatic

- Model & VIN Specific Test Parameters: => see attached .xls spreadsheet

- VIN Specific Information:

(1) M149RXX-0038 (2006 VW/Jetta) -- vehicle pick up scheduled for 04/29/2009 (Wednesday) at ~09:30

VIN:

Ex. 6

Make/Model: Jetta TDI
Model Code: 1K2721
Exterior Color: PEARL GREEN MET.
Prod Date: 08/24/2006
In Service Date: 10/27/2006
Engine#: BRM 051515
Vehicle Source: Mexico

I will not be in office from April 29th until May 1st. If you schedule the inspection for this first vehicle during that time, please contact Dennis Reineke, he'll fill in for me for that time.

His extension is Tel: 248-754 - 4215 and email address:

Dennis.Reineke@vw.com.

If you have any questions or need extra information for the procured vehicle please don't hesitate to contact me. I'm available on my cell phone when I'm not in the office.

Thank you and best regards,
Edy

Edward-Fabian Popa
Manager In-Use Emission Compliance

Volkswagen Group of America, Inc.
Engineering and Environmental Office
3800 Hamlin Road
Auburn Hills, MI 48326, U.S.A.
Tel. +1 248 754 4211
Mobile: +1 248 881 4095
Fax: +1 248 754 4207
mailto:edward.popa@audi.com
http://www.vw.com
http://www.audiusa.com

-----Original Message-----

From: Sohacki.Lynn@epamail.epa.gov [mailto:Sohacki.Lynn@epamail.epa.gov]

Sent: Tuesday, April 21, 2009 9:26 AM

To: Popa, Edward

Subject: In-use vehicles scheduled for next week

Hi, Edy.

Listed below is the information for the vehicles that we have scheduled for next week.

M149RXX-0038 (2006 VW/Jetta) - VIN# **Ex. 6** 0930 vehicle pick up on Wednesday (4/29/09)

Please send the following to me for these vehicles before pick-up.
Please use the attached form:

vehicle target road-load coefficients
fuel tank capacity
40% tank capacity
tire pressure
applicable in-use standards (Does this vehicle qualify for relaxed in-use standards as per 86.1811-04(p)?)

To avoid unnecessary delays and correspondence, please also include explicit directions and, if necessary, pictures for:

disabling traction control, stability control and any load leveling the vehicle may have
preferred method for loading the canister
preferred fuel drain method
any special starting procedures
ABS disabling instructions
for flex-fuel vehicles, the fuel switch procedure

If you have any questions, please feel free to contact me. Thank you.

Lynn Sohacki
Environmental Protection Agency
(734)214-4851
(734)214-4869 fax

(See attached file: In-Use Parameters Form.xls)



National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

Vehicle Parameters for In-use Testing

EPA Vehicle Control Number:

Equivalent Test Weight: Pounds

Nominal Fuel Tank Capacity: Gallons **40% Fill** gallons

Drive Axle: Front, Rear or All wheel drive

Tire Pressure: PSI

Vehicle Target Road-Load Coefficients

A Lb-force

B Lb-force*mph

C Lb-force*mph²

Vehicle Set Road-Load Coefficients

A Lb-force

B Lb-force*mph

C Lb-force*mph²

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)? (Y/N)

Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

Canister Loading Process:

Fuel Draining Process:

ABS Disabling Process:

Fuel Switch Process (Flex Fuel only):

Comments:

For internal EPA Use Only:

This information was obtained from:

- * Letter, e-mail, fax or other document delivered from the manufacturer
(attach any additional information from the manufacturer to this form)
- * Verbal instruction from the manufacturer's representative
- * Other (specify)

Manufacturer Representative: _____ **Date:** _____

EG&G Representative: _____ **Date:** _____

EPA Representative: _____ **Date:** _____

Fuel drain for vehicle preconditioning

Instruction manual

powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung

page 1

date: 04/07/2009

Autor.: Ratte

phone: +0049-5361-9-31763



Fuel drain for vehicle preconditioning

Vehicle preparation (for example: gasoline) -> diesel see page 7

1. Close the fuel line, mount a crimb pincer (yellow), see page 4.
2. Disconnect the fuel line from rail in the engine compartment.
3. Connect the T-piece between rail and fuel line with clips, see page 5.
Attention: Carefully check all clips in the fuel line before you start the engine or pump!
4. Open the fuel line, remove the crimb pincer.

Description of fuel drain (gasoline and diesel)

1. Change the original against a external prepared connector on the fuel pump.
2. Connect a drain line with a male connector at the quickconnector (QC).
3. Switch on the pump with external DC power supply (Voltage:12V/Current:20A).
4. After the fuel drain switch off the power supply.
5. Disconnect the drain line from the selfsealing female QC and close the QC with plug.

➤ Look at the following pictures

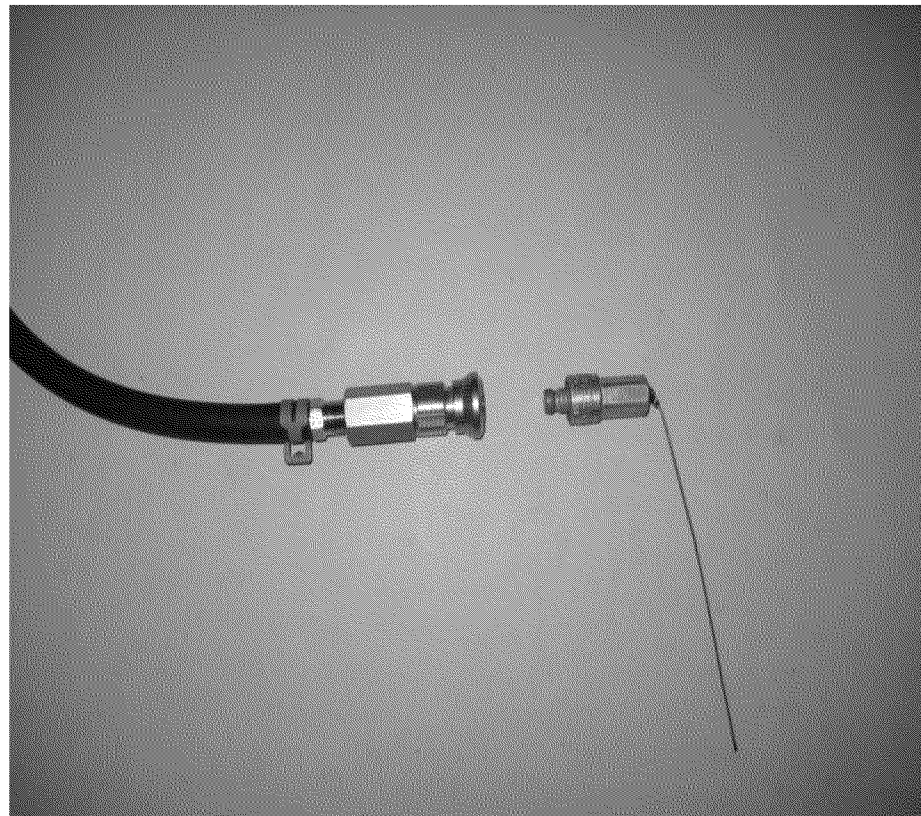
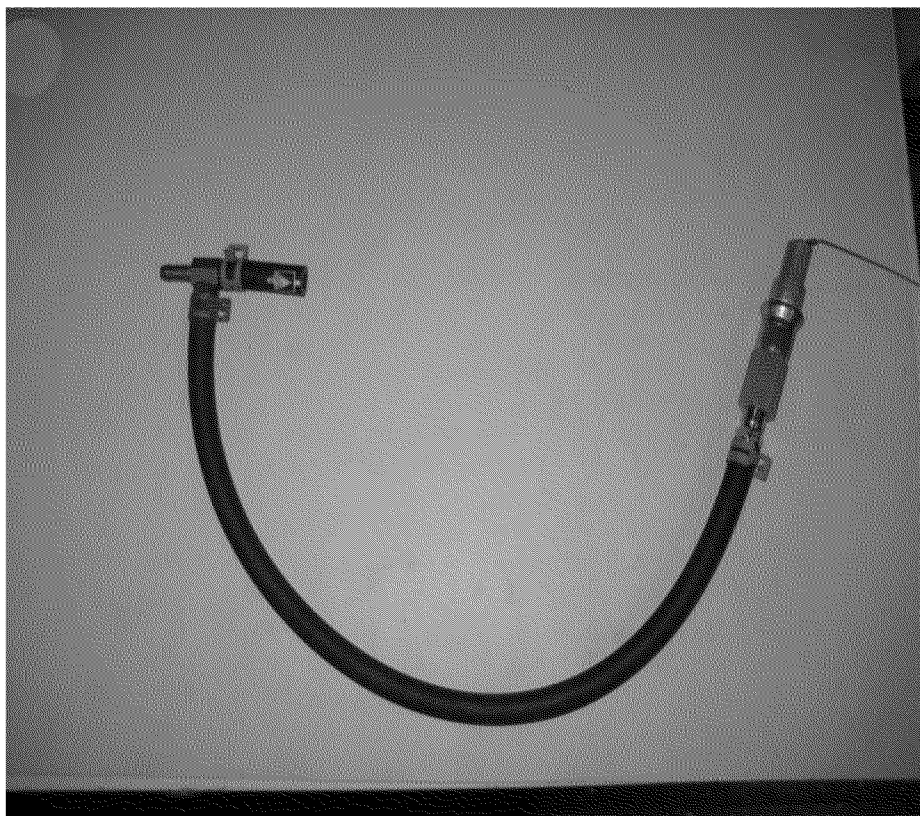
powertrain development

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Fuel drain for vehicle preconditioning

T-piece for fuel draining with selfsealing connector and plug (swagelok QC6)



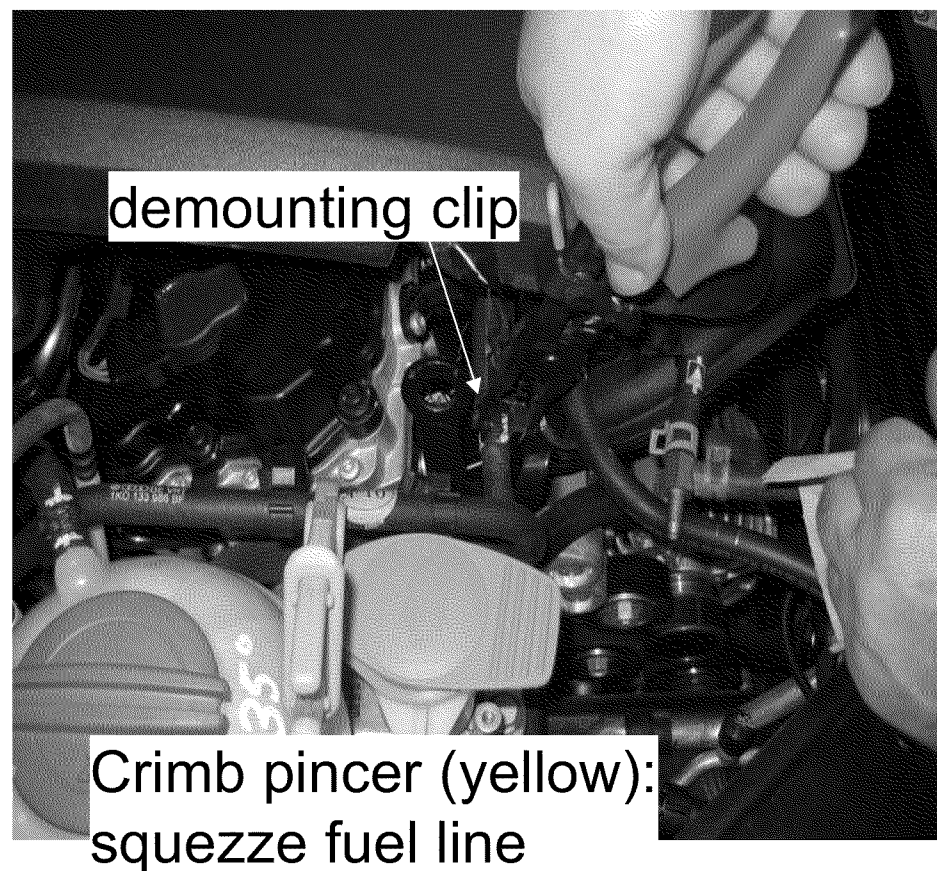
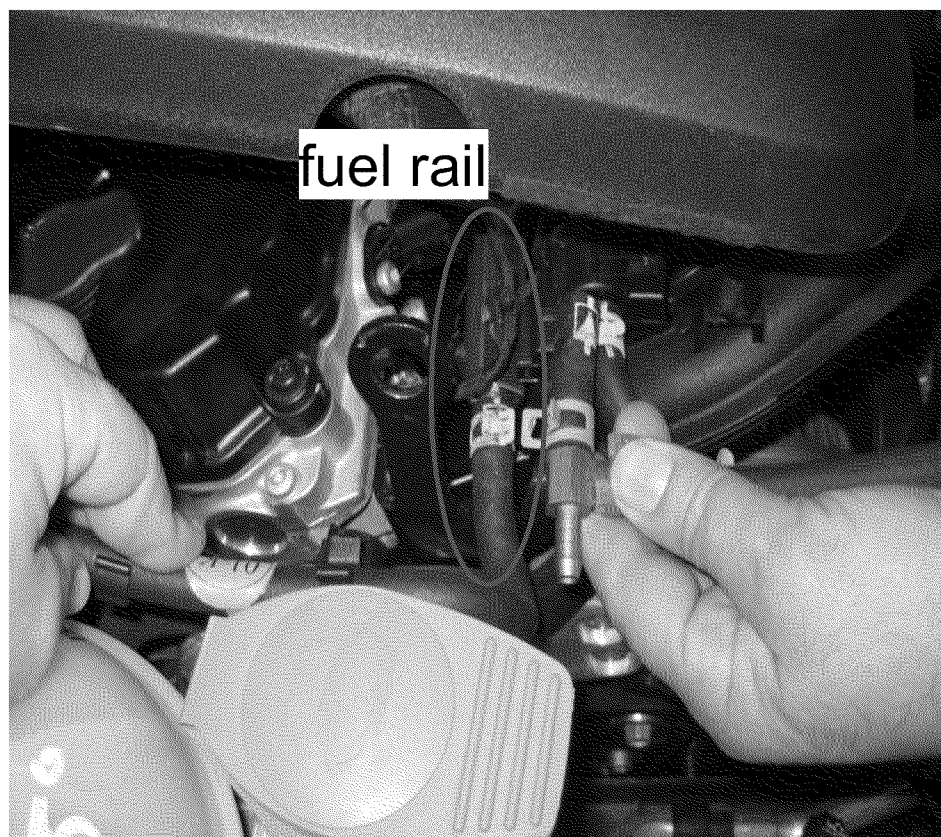
powertrain development

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Fuel drain for vehicle preconditioning

gasoline vehicle: connection of T-piece in the fuel rail (engine compartment)



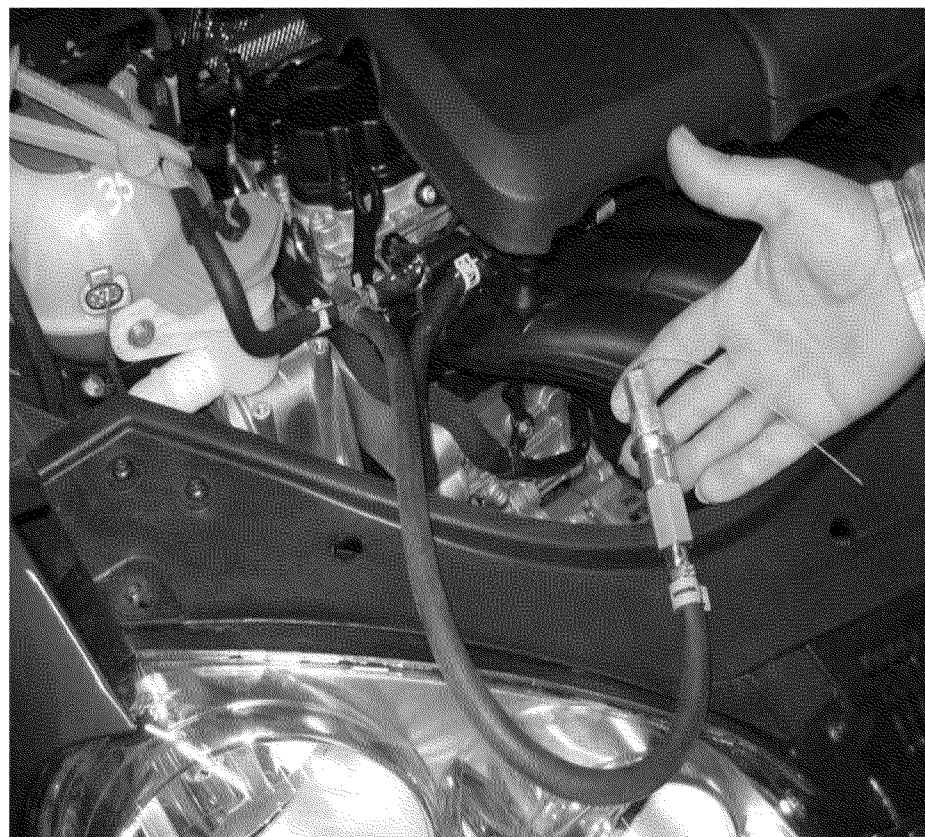
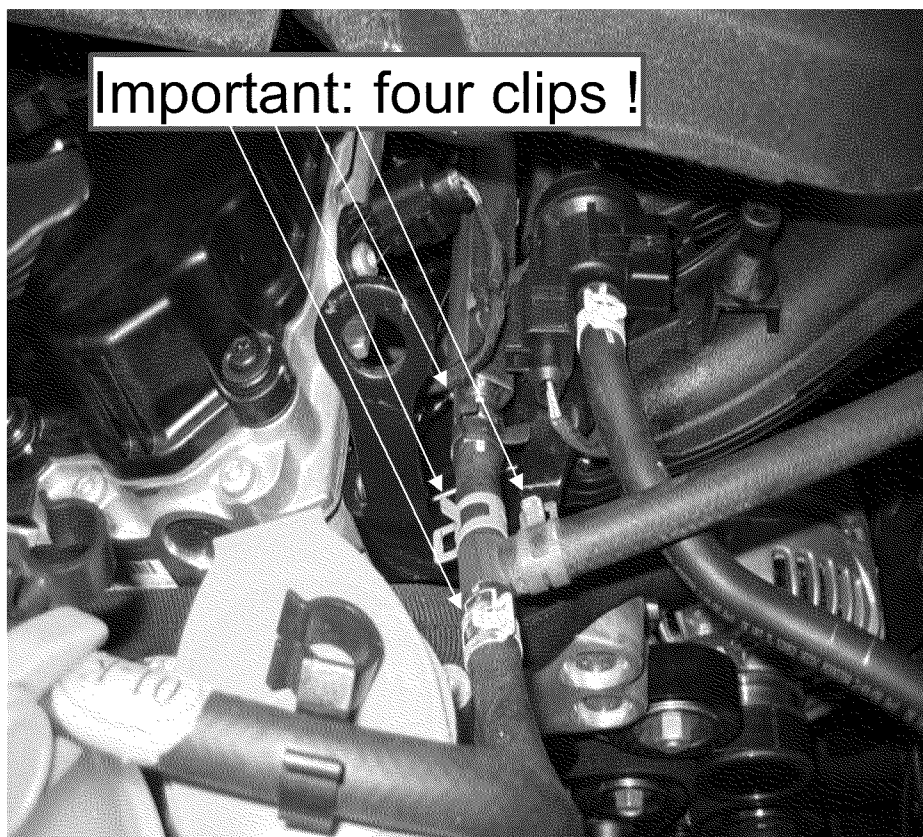
powertrain development

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Fuel drain for vehicle preconditioning

gasoline vehicle: connection of T-piece in the fuel rail (engine compartment)



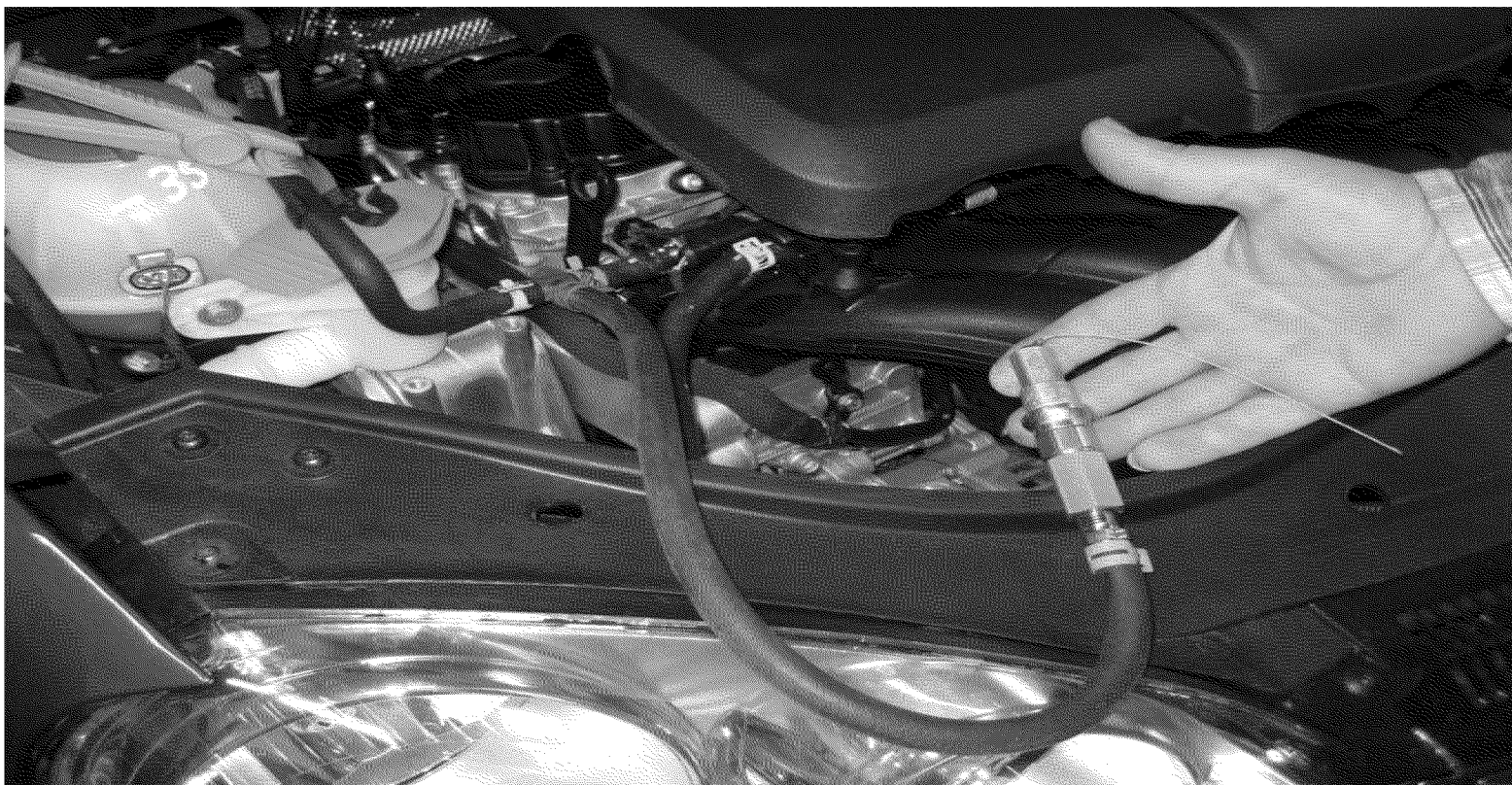
powertrain development

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Fuel drain for vehicle preconditioning

gasoline vehicle: T-piece in the fuel rail (engine compartment) **Attention:** check all clips (four) in the fuel line before you start the engine !



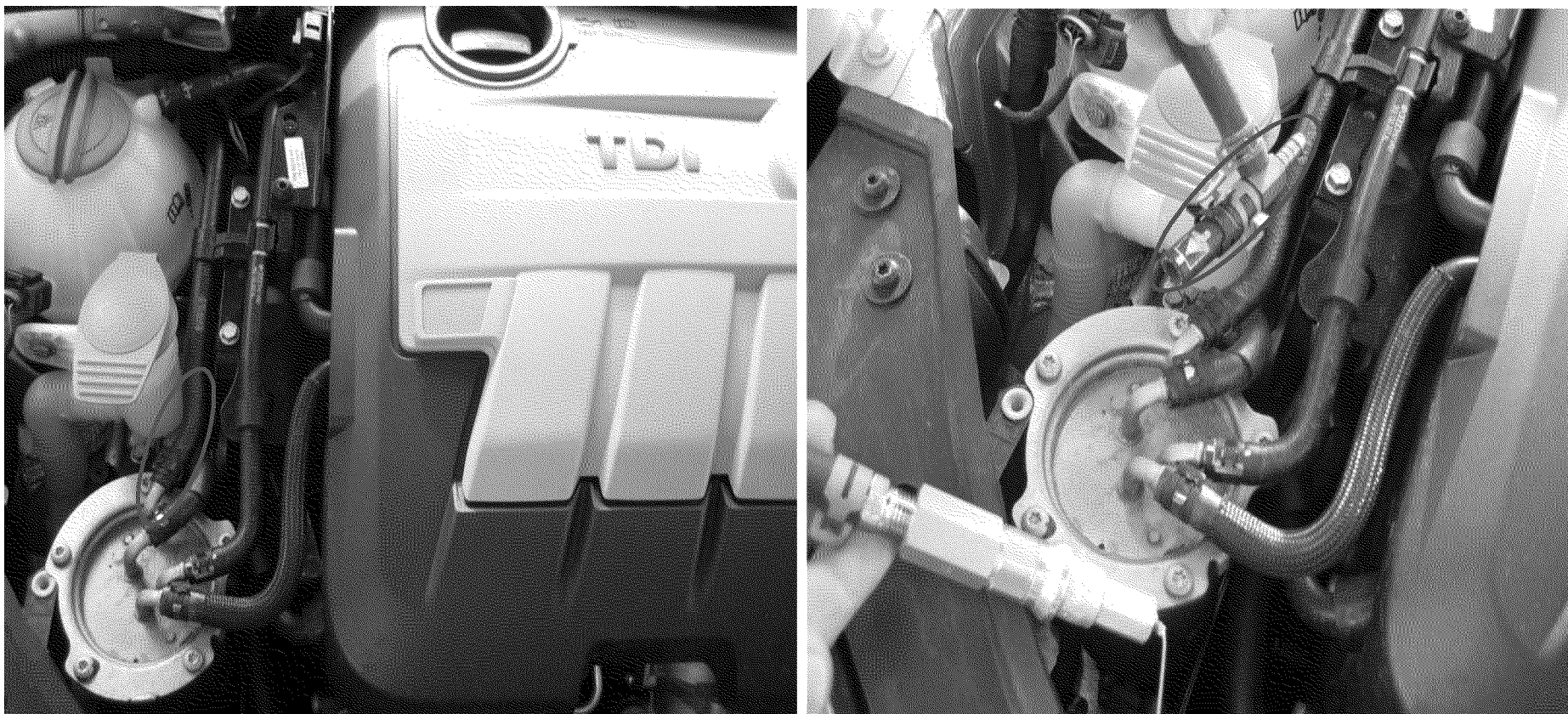
powertrain development

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Fuel drain for vehicle preconditioning

diesel vehicle: connection of T-piece in the fuel rail (engine compartment)



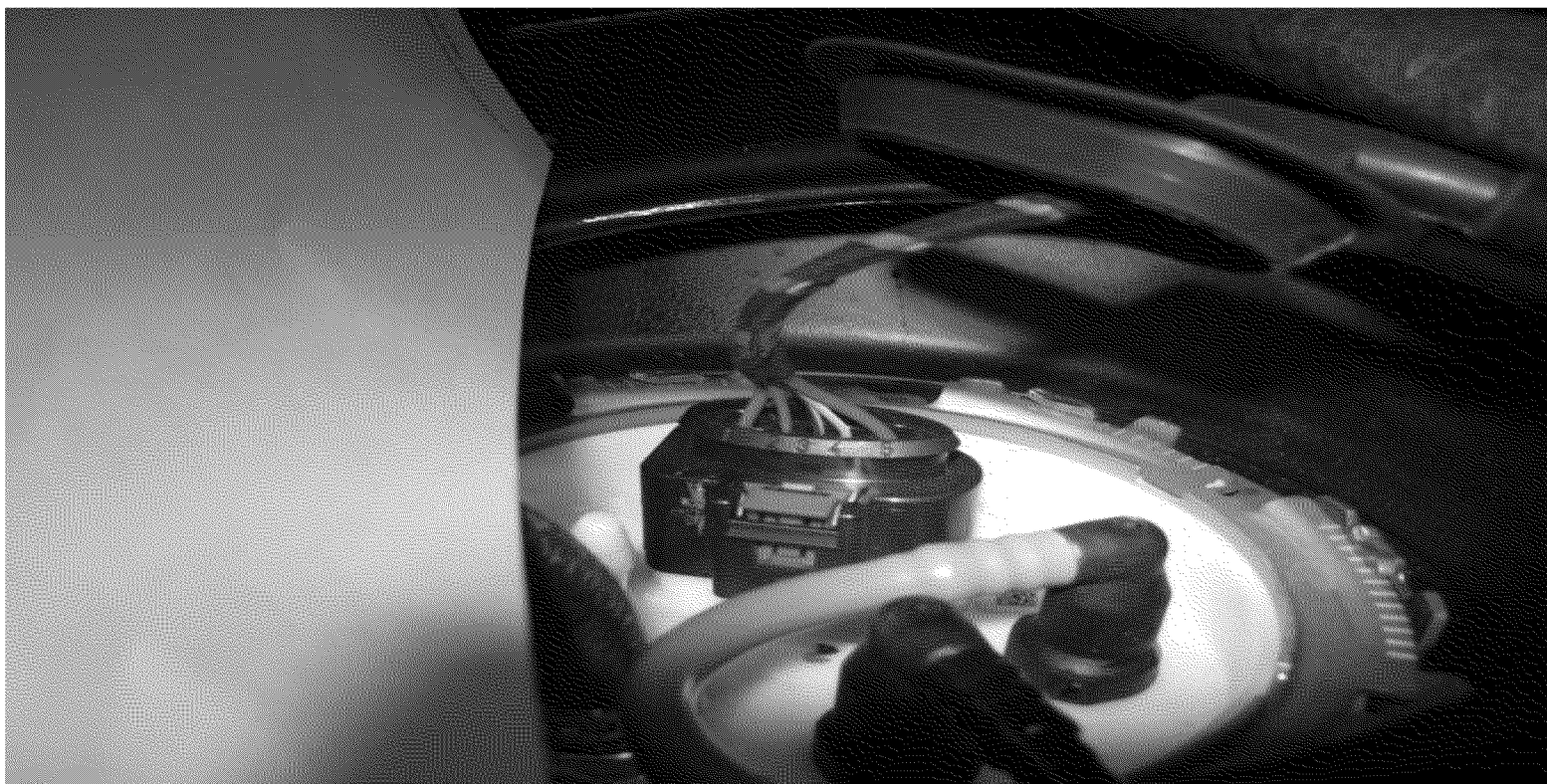
powertrain development

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Fuel drain for vehicle preconditioning

Fuel pump, electrical connector, original part (rear seats, right hand side)



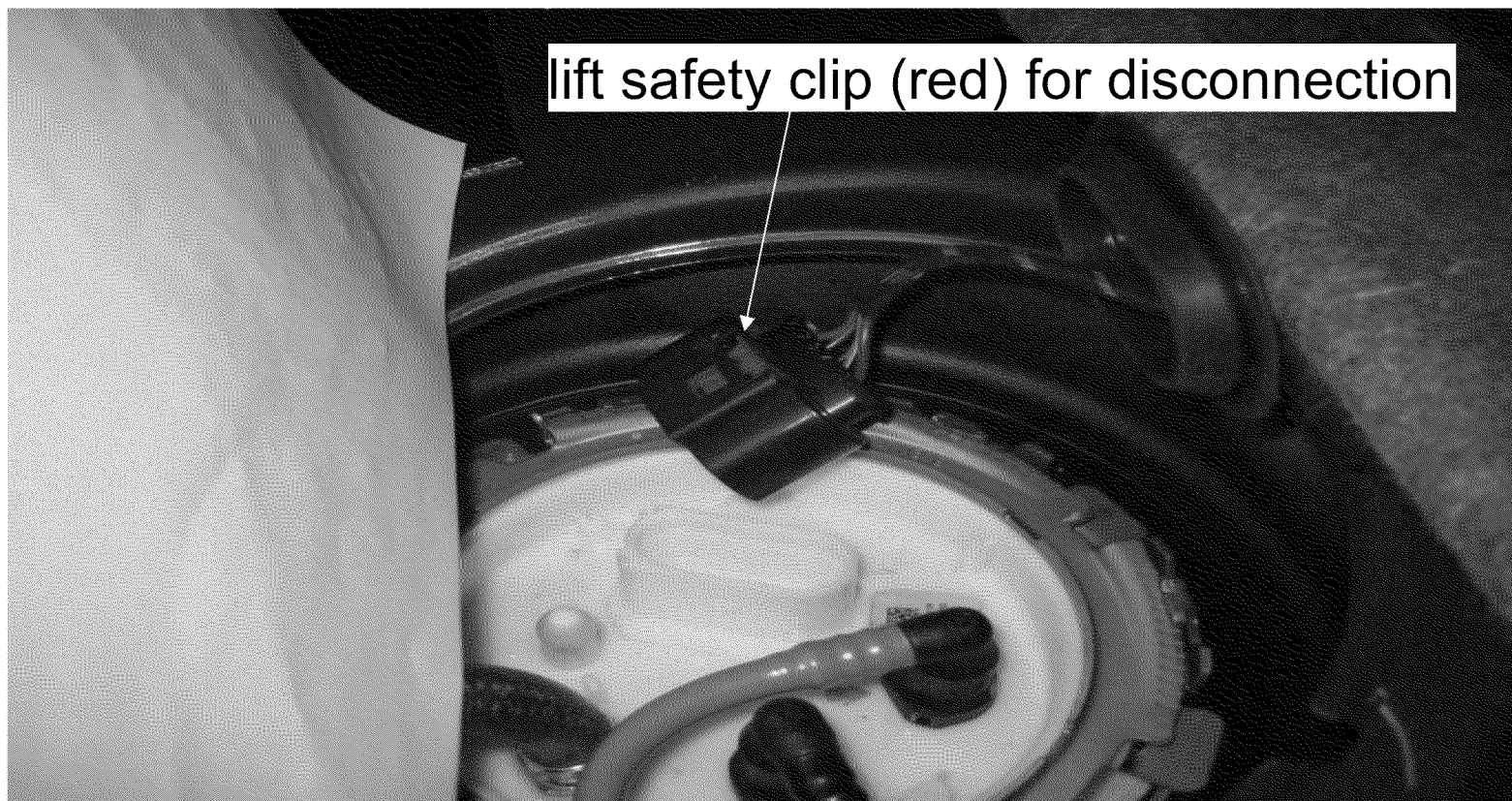
powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung



Fuel drain for vehicle preconditioning

Fuel pump, electrical connector, disconnect original part



powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung



Fuel drain for vehicle preconditioning

Fuel pump, external electrical connector with DC power supply (red wire = plus blue or brown wire = negative pole)



powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung



To: Jim Snyder/AA/USEPA/US@EPA[]
Cc: Ex. 7
From: Ex. 7
Sent: Fri 4/24/2009 12:48:29 PM
Subject: FW: Pending Fees for Volkswagen Group Test Groups

Hello Jim;

Thanks for the call, I must have just left the office when you called.
As you can see from the following information I am still waiting for the
ten fee filing forms to catch up to the \$343,230 moneys we transferred
on April 3, 2009. Bill has now gotten the forms I sent him and I am
waiting for a response. If you discover anything, please let me know.

Thanks,
Ex. 7

-----Original Message-----

From: VandenBroek.Willem@epamail.epa.gov
[mailto:VandenBroek.Willem@epamail.epa.gov]
Sent: Wednesday, April 22, 2009 11:20 AM
To: Ex. 7
Cc: Ex. 7
Ex. 7
Subject: Re: Pending Fees for Volkswagen Group Test Groups

Ex. 7

It's a good thing you're on top of this. I can't speculate on what
exactly happened, but the forms you mailed to St. Louis evidently didn't
make it to our contractor (the Bank is supposed to overnight them to
them and to EPA in D.C.; through a kind of bureaucratic genius, I, who
am supposed to problem shoot, never see them). This explains the lack of
an acknowledgment. Can you send them to me, and I'll take care of it? In
general, submitting the forms by pay.gov is foolproof (even if payment
is done by some other method) as is sending them to fees@EPA.gov.

Thanks,

Bill

Ex. 7 @ To
Willem
Sent by: VandenBroek/AA/USEPA/US@EPA
Ex. 7 cc

Ex. 7

Received Date:

04/22/2009 11:06

Ex. 7

AM

Ex. 7

Transmission

Subject

Date:

Pending Fees for Volkswagen Group

04/22/2009

Test Groups

11:06:28 AM

Hello Bill;

Here is a listing of the last ten 2010 Audi test groups that were awaiting the fee filing forms to catch up with our electronic payment on April 3, 2009. The fee filing forms were mailed on April 1, 2009. If you would; please determine if these test groups are noted as being paid up. I have not received any email confirmation of their payment.

AADXT03.03LD
AADXT04.23UD
AADXV04.2365
AADXV04.2375
AADXV05.2385
AADXV02.03UB
AADXV02.03UA
AADXV02.03PA
AADXV03.03UF
AADXJ03.23UC

Thank you,

Ex. 7

VOLKSWAGEN GROUP OF AMERICA, INC.

Ex. 7

To: "Len Kata" [leonard.kata@vw.com]
From: CN=Linc Wehrly/OU=AA/O=USEPA/C=US
Sent: Fri 4/24/2009 4:36:56 PM
Subject: Re: Norbert Krause Return to Germany

Thanks Len. I agree. I'll be sure to meet with Norbert when his here next week.

From: "Kata, Leonard" [Leonard.Kata@vw.com]
Sent: 04/24/2009 11:41 AM AST
To: Linc Wehrly
Subject: Norbert Krause Return to Germany

Hello Linc:

I recall that you mentioned being interested if there was some type of send-off gathering for Norbert. It turns out that Norbert is hosting his own going-away dinner. I am a little uncomfortable asking him to invite others when he is the one doing the inviting. As far as I know, it is pretty much just his staff.

Norbert's last week is next week, but I understand that he is in Ann Arbor on Tuesday April 28, for a meeting with EPA (Tom Ball, I think). Perhaps this might be an opportunity for you to say good-bye. Sorry about the short notice.

Best regards,

Len

To: Tom Ball/AA/USEPA/US@EPA[]
Cc: Arvon Mitcham/AA/USEPA/US@EPA;"Popa, Edward" [Edward.Popa@audi.com]; Popa, Edward" [Edward.Popa@audi.com]; ynn Sohacki/AA/USEPA/US@EPA;Stephen Healy/AA/USEPA/US@EPA;"Johnson, Stuart" [Stuart.Johnson@vw.com]; tephen Healy/AA/USEPA/US@EPA;"Johnson, Stuart" [Stuart.Johnson@vw.com]; Johnson, Stuart" [Stuart.Johnson@vw.com]; om Anderson/AA/USEPA/US@EPA;"Kohnen, Christoph (VWGoA)" [christoph.kohnen@vw.com]; Kohnen, Christoph (VWGoA)" [christoph.kohnen@vw.com]; Hennard, Mike" [mike.hennard@vw.com]
From: "Krause, Norbert (VWoA)"
Sent: Fri 4/24/2009 7:56:30 PM
Subject: RE: 1.9L Diesels

Hello Tom,

Now we have a final decision from our German colleagues. We are going to reflash the 2004 and 2006 models in the same manner. As soon as we have prepared all the paperwork we come back to you.

Have a nice weekend.

Best regards,

Norbert

-----Original Message-----

From: Ball.Tom@epamail.epa.gov [mailto:Ball.Tom@epamail.epa.gov]
Sent: Montag, 16. März 2009 17:03
To: Krause, Norbert (VWoA)
Cc: Mitcham.Arvon@epamail.epa.gov; Popa, Edward; Sohacki.Lynn@epamail.epa.gov; Healy.Stephen@epamail.epa.gov; Johnson, Stuart; Anderson.Tom@epamail.epa.gov
Subject: RE: 1.9L Diesels

Hello Norbert,

Can you tell me the status of the 2004 and 2006 models referenced in red below?

Tom

"Krause, Norbert (VWoA)"
<Norbert.Krause@vw.com> To Tom Ball/AA/USEPA/US@EPA
Sent by: cc
"Krause, Norbert (VWoA)" Arvon Mitcham/AA/USEPA/US@EPA, "Popa, Edward" <Edward.Popa@audi.com>, Lynn Sohacki/AA/USEPA/US@EPA, Stephen Healy/AA/USEPA/US@EPA, "Johnson, Stuart" <Stuart.Johnson@vw.com>, Tom Anderson/AA/USEPA/US@EPA
Received Date: 12/22/2008 04:06

PM
Transmission
Date:
12/22/2008
04:06:56 PM

Dear Tom:

Thank you for your reply.

You have tested one 2005 car with the old software and with the modified software. The results of the modified software showed that we passed all limits. I assume your decision is that we can go ahead with our activity to do a flash action in the field. As soon as we have done all the paperwork (i.e. dealer and customer letters) we will let you know.

Regarding the 2004 and 2006 model years we need to have a bit more time to finally decide on a similar action. We have to verify the modified software with some vehicles. I expect an outcome later in January 2009.

Thank you for your cooperation.

I wish you and your team a Merry Christmas and a Happy New Year.

Best regards,
Norbert

Norbert Krause
Director, Engineering and Environmental Office (EEO) Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
United States of America
Phone +1-248-754-4201
Mobile +1-248-705-5626
FAX +1-248-754-4207
norbert.krause@vw.com

-----Original Message-----

From: Ball.Tom@epamail.epa.gov [mailto:Ball.Tom@epamail.epa.gov]
Sent: Freitag, 14. November 2008 09:56
To: Krause, Norbert (VWoA)
Cc: Mitcham.Arvon@epamail.epa.gov; Popa, Edward; Sohacki.Lynn@epamail.epa.gov;
Healy.Stephen@epamail.epa.gov; Johnson, Stuart; Anderson.Tom@epamail.epa.gov
Subject: RE: 1.9L Diesels

Norbert,

Our position is that if the 2004 and 2006 vehicles are identical calibrations, we don't need any more test data. We

would consider them in the same class as far as recall is concerned, and should be included in the recall. However, if there are differences in the calibrations as they relate to this problem, then we would like to see test data.

Tom

To: richard.thomas@vw.com[]
Cc: christoph.kohnen@vw.com;CN=Jim
Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Vincent
Mazaitis/OU=AA/O=USEPA/C=US@EPA;CN=Robert
Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]; N=Jim
Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Vincent
Mazaitis/OU=AA/O=USEPA/C=US@EPA;CN=Robert
Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]; N=Vincent
Mazaitis/OU=AA/O=USEPA/C=US@EPA;CN=Robert
Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]; N=Robert
Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]
From: CN=David Good/OU=AA/O=USEPA/C=US
Sent: Sat 5/2/2009 3:07:10 AM
Subject: 2009 & 2010 FE Guide data for web posting - Please review & let EPA know after the
Verify data is error free and ready for posting
[2009-2010FEguide-VW-Audi-all rel dates04-29-09.xls](#)

Richard,

Attached is an Excel Spreadsheet with the 2009 & 2010 FE data from EPA's Verify data base as of April 29, 2009. Please review the spread sheet and confirm for your records that the data are correct. Please make sure that the release date is accurate for the models listed. Please double check any new entries into Verify to make sure they are error free. Any changes should be made directly in the Verify database. [Do not correct the spreadsheet and send it back.]

The last date to make changes is May 12, 2009. EPA will review the data on May 13 and forward it to DOE on May 14 for posting on the web on May 19, 2009.

Release Date: As you know, EPA added a "release date" field to Verify on the March 27, 2009 upgrade---so labels processed before that date did not have a release date. We request that manufacturers process a correction to your 2010 FE Labels, if needed, so that all 2010 Labels will have a release date. [You may also correct your 2009 Labels, if you like.] We will forward to DOE all 2009 model year FE Labels for web posting if the release date is blank or the release date is earlier than May 19, 2009. We will forward to DOE the 2010 model year FE Labels for web posting on May 19, 2009 only if the Label has a release date of May 19, 2009 or earlier. (We will not forward 2010 model year FE Labels to DOE if the release date is missing.)

Reminders:

1. Please double check the transmission and gas guzzler fields in the attached spreadsheet (called "Trans as listed in FE Guide (derived from col X thru AC)" and "Guzzler?" in the attached spread sheet). These fields were derived by EPA (and not directly input to Verify by manufacturers).
2. For flexible-fueled and dual fuel vehicles, please enter data for both fuels in the same model type index---by clicking on the buttons to "Add Another Fuel Usage" and "Add another Base Level Fuel Usage." Then, for example, enter the gasoline test data in "Base Level Fuel Usage #1" and the E85 test data in "Base Level Fuel Usage #2." Please don't enter the gasoline and alternative fuel data using two separate index numbers.
3. If you need to enter a basic engine descriptor (so that customers can easily identify two otherwise identical model types) please enter the descriptor in the Verify "Manufacturer Fuel Economy Label Comments" field. Please be clear and concise about the information added in the comment field, for example: Engine descriptor "4-valve" needed for this model type.

Please email me and your EPA team member when your 2009 & 2010 Verify data is "good to go" (after any needed changes or additions are made to Verify and you are sure that the Verify data is correct).

Regards

----- Forwarded by David Good/AA/USEPA/US on 05/01/2009 07:35 PM -----

Fw: 2010 FE Labels - Please use an Ethanol (E85) price of \$1.70/gal to calculate annual fuel costs for EPA's Verify data base

David Good to: Darin_Johnson, peter_meier, richard.thomas, dennis.reineke, thomas.hofmann, wilhelm.hall, deborah.a.zielesch, adelarosa, elarue1, rbabcock, KhanF, ogumah, vvarjabe, drobertson, skurata, alex.travis, wlewis, gary.jones, tony.dambrosi, jennifer.jasperson, murphy, balsip, gbuffali, cander44, plennvi, jcabaniss, r.maxwell, remaxwell, gambrozaitis, rseal3, kbalmer, jyarow, kenboshart, juliawinter, jcusuman, ddoku, shkim, mmpian, vdauria, doug.devries, gary.bowne, john.healey, dennis.pawlak, joan.whinihan, luis.hernandez, cjohnson, subaru-hiroyuki-shinohara, ross.gatzke, bstott, mwb, ml90, andreas.roessler, jdf14, asw9
04/29/2009 01:42 PM

Cc: Linc Wehrly, Mary Manners, Robert Peavyhouse, hopsonjl, lij1, Ching-Shih Yang, Karen Danzeisen

To manufacturers,

In my 4/24/09 email message, I promised to provide manufacturers with an updated fuel cost for Ethanol (E85) which manufacturers can use to calculate and enter annual fuel cost information into EPA's Verify data base for 2010 FE Labels.

Please use an Ethanol (E85) fuel cost of \$1.70 per gallon. This fuel cost can be used in the interim for 2010 FE Labels until EPA provides updated 2010 fuel costs in a June/July 2009 guidance letter.

As you know, this E85 fuel cost will not be used on the FE Guide website (www.fueleconomy.gov). For www.fueleconomy.gov, DOE updates the annual fuel cost information every week or so (as needed) based on nationwide average fuel costs. For example, on 4/29/09, www.fueleconomy.gov based annual fuel cost estimates on fuel costs of \$2.05 for unleaded regular gasoline, \$2.28 for unleaded premium gasoline, \$2.09 for diesel fuel and \$1.81 for E85.

If there are questions about this email, please contact me at 734-214-4450 or by email or Bob Peavyhouse at 734-214-4814 or by email.

Thanks

----- Forwarded by David Good/AA/USEPA/US on 04/29/2009 01:03 PM -----

2010 FE Guide - Schedule for May, 2009 web release on www.fueleconomy.gov

David Good to: Darin_Johnson, peter_meier, richard.thomas, dennis.reineke, thomas.hofmann, wilhelm.hall, deborah.a.zielesch, mwb, ml90, adelarosa, elarue1, rbabcock, KhanF, ogumah, vvarjabe, drobertson, skurata, andreas.roessler, alex.travis, wlewis, gary.jones, tony.dambrosi, jennifer.jasperson, murphy, balsip, gbuffali, cander44, plennvi, jcabaniss, r.maxwell, remaxwell, gambrozaitis, rseal3, kbalmer, jyarow, kenboshart, juliawinter, jcusuman, ddoku, shkim, mmpian, vdauria, doug.devries, gary.bowne, john.healey, dennis.pawlak, joan.whinihan, luis.hernandez, cjohnson, subaru-hiroyuki-shinohara, ross.gatzke, bstott 04/24/2009 06:24 PM

Cc: Linc Wehrly, Mary Manners, Karen Danzeisen, Ching-Shih Yang, Amy Bunker, Roberts French, hopsonjl, lij1, Robert Peavyhouse

To manufacturers,

Here's our tentative schedule for May, 2009 web update for the 2010 FE Guide. Janet Hopson, DOE thought that this schedule would be OK with them.

Date	Action
Apr 28 (Tues)	EPA Verify staff performs 2010 FE Guide Verify query (separated by mfr, etc) for EPA review
Apr 29 (Wed)	EPA sends FE Guide data to manufacturers for review & corrections; also sends prelim data to DOE [I may be 1-2 days late this year]
Apr 29-May 12	Mfrs review & make corrections
May 12 (Tues)	Last day for mfr corrections and data entry
May 13 (Wed)	EPA Verify staff performs 2010 FE Guide Verify query for EPA review
May 14 (Th)	EPA sends final data to DOE
May 19 (Tu)	DOE publishes 2010 FE Guide data on web

Reminders:

Release date for 2010 Labels: Verify added release data to the FE Label module in a March 27, 2009 update. Any 2009 and 2010 labels processed prior to March 27 did not have release date. Please do a correction in Verify for all 2010 FE labels which don't have release dates, and add in the appropriate release date. We will post the early-introduction 2010 models on the web which have release dates of May 15 or earlier. [We will not post models with missing release dates.]

Release date for 2009 Labels: For 2009 FE Labels, we intend to send all 2009 FE labels to DOE on April 29, 2009 for web posting shortly thereafter. We intend to release any 2009 FE label in EPA's Verify data base which doesn't have a release date. Please call or email me if you have an FE Label in Verify (with no release date) which you don't want to be released to the web on 4/29/09.

Minivan Classification: Please continue to use the minivan guidance provided in CISC-07-08 (and do not use the 180 cubic feet interior volume specification in the regulations).

Fuel Costs: Until new 2010 fuel costs are provided to manufacturers in a future EPA guidance letter, manufacturers should use the 2009 model year fuel cost update provided in CISC-09-08. The new 2010 fuel costs will be provided in June or July, 2009. For alternative fueled vehicles, manufacturers may use the fuel costs provided in CISC-08-10 for Hydrogen and Electricity. Please contact Bob Peavyhouse (734-214-4814 or by email) or me if you need a fuel cost for LPG, CNG or Ethanol (E85) vehicles. I'll try to send everyone a followup email next week with the appropriate Ethanol (E85) fuel cost.

Range of comparable vehicles: Until the 2010 ranges (for the various classes of vehicles) are provided in a future EPA guidance letter, manufacturers should continue to use the 2009 model year ranges provided in CISC-08-12 (except if a model exceeds the 2009 range values, the manufacturer should extend the range appropriately); ref 40 CFR 600.306-08(b)(1).

If you have any questions, feel free to give your team member or me a call. I'm at 734-214-4450.

Regards

EPA comn	VERIFY cc	Model Yr	Mfr Name	Division	Carline	Verify Mfr
Annual fue	Yes	2009	Audi	Audi	A6 AVANT QUATTRO	ADX
Annual fue	Yes	2009	Audi	Audi	A6 QUATTRO	ADX
Guzzler E	Yes	2009	Audi	Audi	Q5	ADX
Guzzler E	Yes	2009	Audi	Audi	Q7	ADX
Guzzler E	Yes	2009	Audi	Volkswagen	TOUAREG	ADX

Index (Mo	Eng	Displ #	Cyl	Trans as list	City	Hwy	Com	City	Un	Hwy	Un	Comb	Un	City	Hwy	Com
	43	3.0	6	Auto(S6)	18	26	21	21.8	34.8	26.2052	17.6	25.95658				
	42	3.0	6	Auto(S6)	18	26	21	21.8	34.8	26.2052	17.6	25.95658				
ify.	44	3.2	6	Auto(S6)	18	23	20	22.7	30.7	25.7155	17.8	22.97826				
ify.	46	3.0	6	Auto(S6)	17	25	20	19.8	33.2	24.1943	16.6	24.85017				
ify.	47	3.0	6	Auto(S6)	17	25	20	21.9	34.4	26.1811						

Driveline	Trans	Aspir	Trans	Trans Desc	Trans, O#	Ge	Trans Lockup	Trans Creeper	Gear
SC	Superchar	SA	Semi-Automatic		6Y		N		
SC	Superchar	SA	Semi-Automatic		6Y		N		
NA	Naturally	ASA	Semi-Automatic		6Y		N		
TC	Turbochar	SA	Semi-Automatic		6Y		N		
TC	Turbochar	SA	Semi-Automatic		6Y		N		

Drive Sys	Drive Desc	Basic Engine/Testgroup	Max Ethanol %	Max Biodiesel %
A	All Wheel Drive	9ADXV03.03UF		
A	All Wheel Drive	9ADXV03.03UF		
A	All Wheel Drive	9ADXT03.23UC		
A	All Wheel Drive	9ADXT03.03LD		
A	All Wheel Drive	9ADXT03.03LD		

Model Type	Driving Range	Fuel Usage	Fuel Usage Desc - Conventional Fuel	Fuel Unit	Fuel Unit Desc
		GP	Gasoline (Premium Unleaded Recommended)	MPG	miles per gallon
		GP	Gasoline (Premium Unleaded Recommended)	MPG	miles per gallon
		GP	Gasoline (Premium Unleaded Recommended)	MPG	miles per gallon
		GP	Gasoline (Premium Unleaded Recommended)	MPG	miles per gallon
		GP	Gasoline (Premium Unleaded Recommended)	MPG	miles per gallon

Class	Exempt	Gas Guzzler	Exempt Desc	2Dr Pass Vol	2Dr Lugg Vol	4Dr Pass Vol	4Dr Lugg Vol
N		Not exempt				99	34
N		Not exempt				98	16
N		Not exempt					
N		Not exempt					
N		Not exempt					

Htchbk Pass Vol	Htchbk Lugg Vol	Annual Fuel1 Cost	EPA Calcula	Comment - Model Type Desc
		3070	\$1,499	
		3070	\$1,499	
		3225	\$1,575	
		3375	\$1,575	
		3375	\$1,575	

City2 FE (G Hwyl Fuel lComb2 Fue City2 Unadj Hwyl Unadj Comb2 Una City2 Fuel 5Hwyl Fuel 5

Alt Fuel2 Usage	Fuel2 Usage IFuel2 Unit - AFuel2 Unit De	Fuel2 Annual	Fuel2 EPA C
-----------------	--	--------------	-------------

Var	Alt	Per	Foot	Fuel	Cost	Alt	Var	Calc	Approach
		2				8	Midsize Station Wagons	5C-VEHSPEC	
		2				5	Midsize Cars	5C-VEHSPEC	
		2				23	Special Purpose Vehicle, SUV 4WD	5C-VEHSPEC	
		2				23	Special Purpose Vehicle, SUV 4WD	5C-VEHSPEC	
		2				23	Special Purpose Vehicle, SUV 4WD	5C-DRV	

Calc Approach Desc	Model Type	Sales	Release Dt	EPA FE Label Dataset ID
Vehicle Specific 5-cycle label	(b) (4)			131
Vehicle Specific 5-cycle label				130
Vehicle Specific 5-cycle label				134
Vehicle Specific 5-cycle label				135
Derived 5-cycle label				136

Mfr Contact	Contact Email	Contact Phone
RICHARD THOMAS	Richard.Thomas@VW.com	248 754 4213
RICHARD THOMAS	Richard.Thomas@VW.com	248 754 4213
RICHARD THOMAS	Richard.Thomas@VW.com	248 754 4213
RICHARD THOMAS	Richard.Thomas@VW.com	248 754 4213
RICHARD THOMAS	Richard.Thomas@VW.com	248 754 4213

To: Jim Snyder/AA/USEPA/US@EPA[]
From: "Hart, Robert (VWoA)"
Sent: Mon 5/4/2009 5:29:55 PM
Subject: Status of Certificate for Bentley Test Group ABEXV06.0501
<mailto:robert.hart@vw.com>

Hello Jim,

Can you tell me the status of the Certificate for Bentley Test Group ABEXV06.0501?

Best regards,

Bob Hart

Robert Hart

Emissions & Regulatory Analyst

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4224

Fax: 248 754 4207

<mailto:robert.hart@vw.com>

To: "Hart, Robert (VWoA)" [Robert.Hart@vw.com]
Cc: []
Bcc: []
From: CN=Jim Snyder/OU=AA/O=USEPA/C=US
Sent: Mon 5/4/2009 5:48:10 PM
Subject: Re: Status of Certificate for Bentley Test Group ABEXV06.0501
<mailto:robert.hart@vw.com>

I've been waiting for the fee payment to appear on the list. It is listed on today's update so I can now finish reviewing it.

Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

"Hart, Robert (VWoA)" <Robert.Hart@vw.com>
05/04/2009 01:29 PM
To: Jim Snyder/AA/USEPA/US@EPA
cc
Subject: Status of Certificate for Bentley Test Group ABEXV06.0501

Hello Jim,

Can you tell me the status of the Certificate for Bentley Test Group ABEXV06.0501?

Best regards,

Bob Hart

Robert Hart
Emissions & Regulatory Analyst
Engineering and Environmental Office

Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326

Phone: 248 754 4224
Fax: 248 754 4207
<mailto:robert.hart@vw.com>

To: Lynn Sohacki/AA/USEPA/US@EPA[]
Cc: "Johnson, Stuart" [Stuart.Johnson@vw.com]; Kohnen, Christoph (VWGoA)" [christoph.kohnen@vw.com]; Reineke, Dennis" [Dennis.Reineke@vw.com]; ruce Garrison/AA/USEPA/US@EPA[]
From: "Popa, Edward"
Sent: Tue 5/5/2009 12:41:27 PM
Subject: RE: In-use vehicles scheduled for next week
[fuel_drain.pdf](#)
[02 In-Use Parameters Form.xls](#)
[03 In-Use Parameters Form.xls](#)

Hello Lynn,

Please find below the test information and parameters for the actual EPA In-Use Surveillance Test Program -Eng. Fam. 6VWXXV01.9238 and for the vehicles M148RXX-0042 and M149RXX-0166:

Lab: NVFEL Ann Arbor,
 Michigan
 Engine Family: 6VWXXV01.9238
 Estimated Start Date: Week-ending May 8, 2008
 Recall/Testing Representative: Lynn Sohacki
 Telephone Number: (734) 214-4851
 E-mail address: Sohacki.Lynn@epa.gov
 Class Numbers: M148/M149 (low-mileage /
 high-mileage)

- General Test Group Information:

Engine Fam.: 6VWXXV01.9238
 Concept: 1.9L / I4 (TDI-PD)
 Em. Standard: InT2 - BIN 10
 Sales Area: 50 States / Canada
 Engine HP: 100 hp
 Engine Code: BRM
 Models in TG: Jetta
 EVAP Fam.: n/a
 EVAP Standard: n/a
 # of sold vehicles in TG: 38,221

- General Vehicle Group Information:

Tank Capacity 100% [l] 55 [l]
 Tank Capacity 40% [l] 22 [l]
 Tank Capacity 100% [gal] 14.53 [gal]
 Tank Capacity 40% [gal] 5.81 [gal]
 Canister Working Cap. [g] n/a [g]
 Standard Tire Size 205/55 R16
 Axle Ratio 3.389 - Manual / 3.333-
 Automatic
 Target road-load coef. 30.12 (F0) 0.1954 (F1)
 0.0186 (F2) - Manual
 35.07 (F0)
 0.1809 (F1) 0.0193 (F2) - Automatic

- Model & VIN Specific Test Parameters: => see attached .xls spreadsheet

- VIN Specific Information:

(2) M148RXX-0042 (2006 VW/Jetta) -- vehicle pick up scheduled for 05/05/2009 (Tuesday) at ~09:30

VIN: Ex. 6

Make/Model: Jetta TDI
Model Code: 1K2723
Exterior Color: PLATINUM GRAY
Prod Date: 03/06/2006
In Service Date: 05/20/2006
Engine#: BRM 037198
Vehicle Source: Mexico

(3) M149RXX-0166 (2006 VW/Jetta) -- vehicle pick up scheduled for 05/06/2009 (wednesday) at ~07:30

VIN: Ex. 6

Make/Model: Jetta TDI
Model Code: 1K2721
Exterior Color: PLATINUM GRAY
Prod Date: 07/06/2006
In Service Date: 07/31/2006
Engine#: BRM 047933
Vehicle Source: Mexico

I talked on the phone with Bruce, and we planed to have the inspection for both vehicles on Wednesday Mai 6th at 12:30.

If you have any questions or need extra information for the procured vehicles please don't hesitate to contact me. I'm available on my cell phone when not in the office.

Thank you and best regards,
Edy

Edward-Fabian Popa
Manager In-Use Emission Compliance

Volkswagen Group of America, Inc.
Engineering and Environmental Office
3800 Hamlin Road
Auburn Hills, MI 48326, U.S.A.
Tel. +1 248 754 4211
Mobile: +1 248 881 4095
Fax: +1 248 754 4207
mailto:edward.popa@audi.com
http://www.vw.com

<http://www.audiusa.com>

-----Original Message-----

From: Sohacki.Lynn@epamail.epa.gov [mailto:Sohacki.Lynn@epamail.epa.gov]

Sent: Tuesday, April 28, 2009 3:41 PM

To: Popa, Edward

Subject: In-use vehicles scheduled for next week

Hi, Edy.

Listed below is the information for the vehicles that we have scheduled for next week.

M148RXX-0042 (2006 VW/Jetta) - VIN# Ex. 6 0930 vehicle pick up on 5/5/09 (Tuesday)

M149RXX-0166 (2006 VW/Jetta) - VIN# Ex. 6 0730 vehicle pick up on 5/6/09 (Wednesday)

Please send the following to me for these vehicles before pick-up.
Please use the attached form:

vehicle target road-load coefficients
fuel tank capacity
40% tank capacity
tire pressure
applicable in-use standards (Does this vehicle qualify for relaxed in-use standards as per 86.1811-04(p)?)

To avoid unnecessary delays and correspondence, please also include explicit directions and, if necessary, pictures for:

disabling traction control, stability control and any load leveling the vehicle may have
preferred method for loading the canister
preferred fuel drain method
any special starting procedures
ABS disabling instructions
for flex-fuel vehicles, the fuel switch procedure

If you have any questions, please feel free to contact me. Thank you.

Lynn Sohacki
Environmental Protection Agency
(734)214-4851
(734)214-4869 fax

(See attached file: In-Use Parameters Form.xls)

Fuel drain for vehicle preconditioning

Instruction manual

powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung

page 1

date: 04/07/2009

Autor.: Ratte

phone: +0049-5361-9-31763



Fuel drain for vehicle preconditioning

Vehicle preparation (for example: gasoline) -> diesel see page 7

1. Close the fuel line, mount a crimb pincer (yellow), see page 4.
2. Disconnect the fuel line from rail in the engine compartment.
3. Connect the T-piece between rail and fuel line with clips, see page 5.
Attention: Carefully check all clips in the fuel line before you start the engine or pump!
4. Open the fuel line, remove the crimb pincer.

Description of fuel drain (gasoline and diesel)

1. Change the original against a external prepared connector on the fuel pump.
2. Connect a drain line with a male connector at the quickconnector (QC).
3. Switch on the pump with external DC power supply (Voltage:12V/Current:20A).
4. After the fuel drain switch off the power supply.
5. Disconnect the drain line from the selfsealing female QC and close the QC with plug.

➤ Look at the following pictures

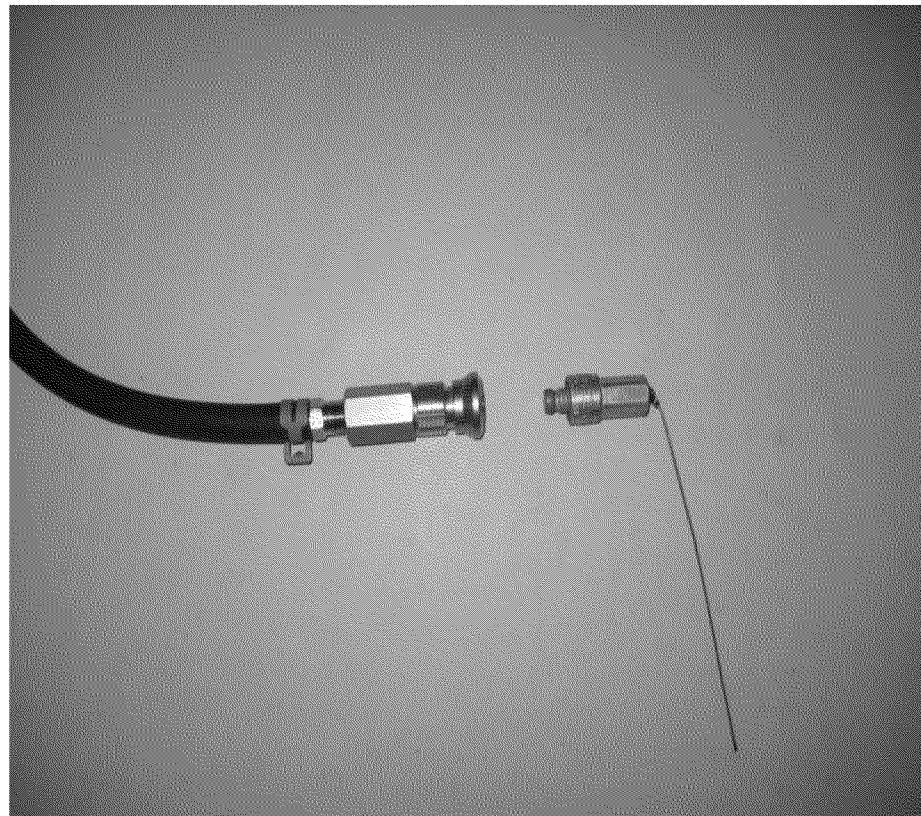
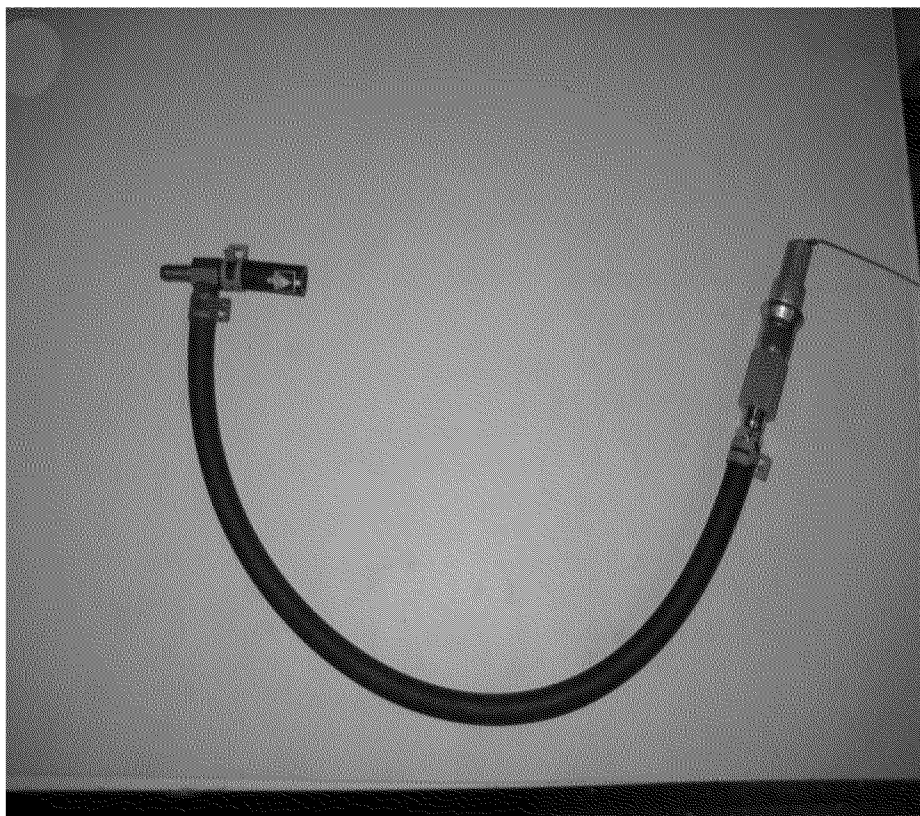
powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung



Fuel drain for vehicle preconditioning

T-piece for fuel draining with selfsealing connector and plug (swagelok QC6)



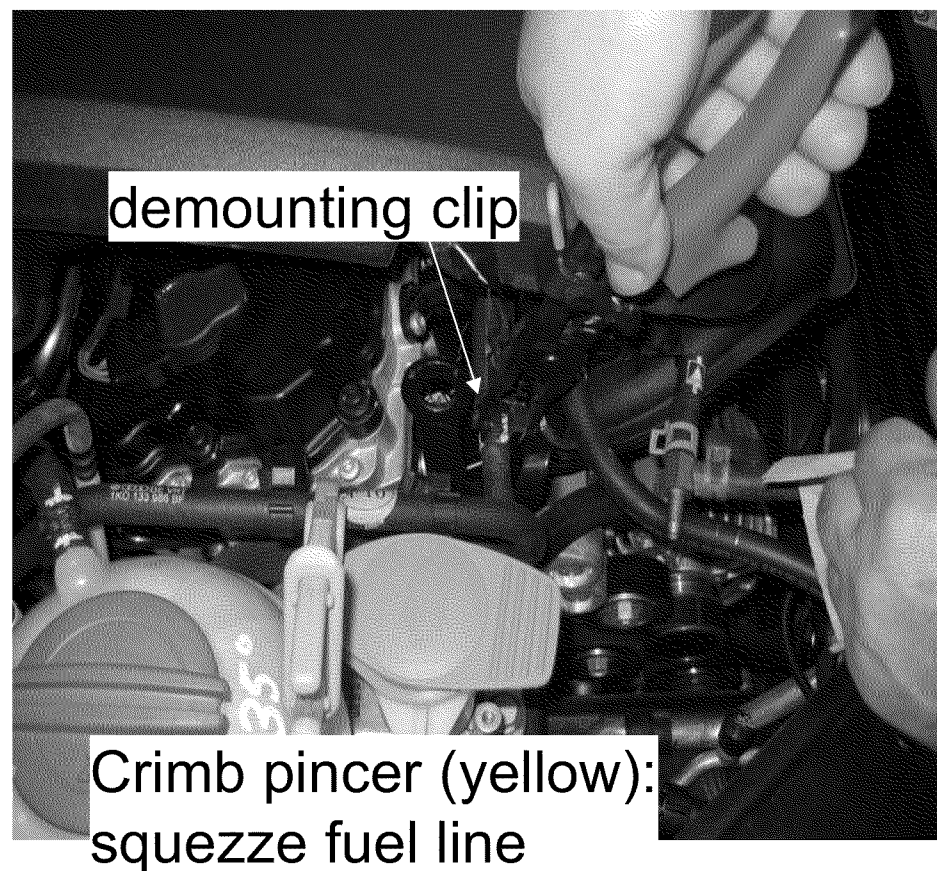
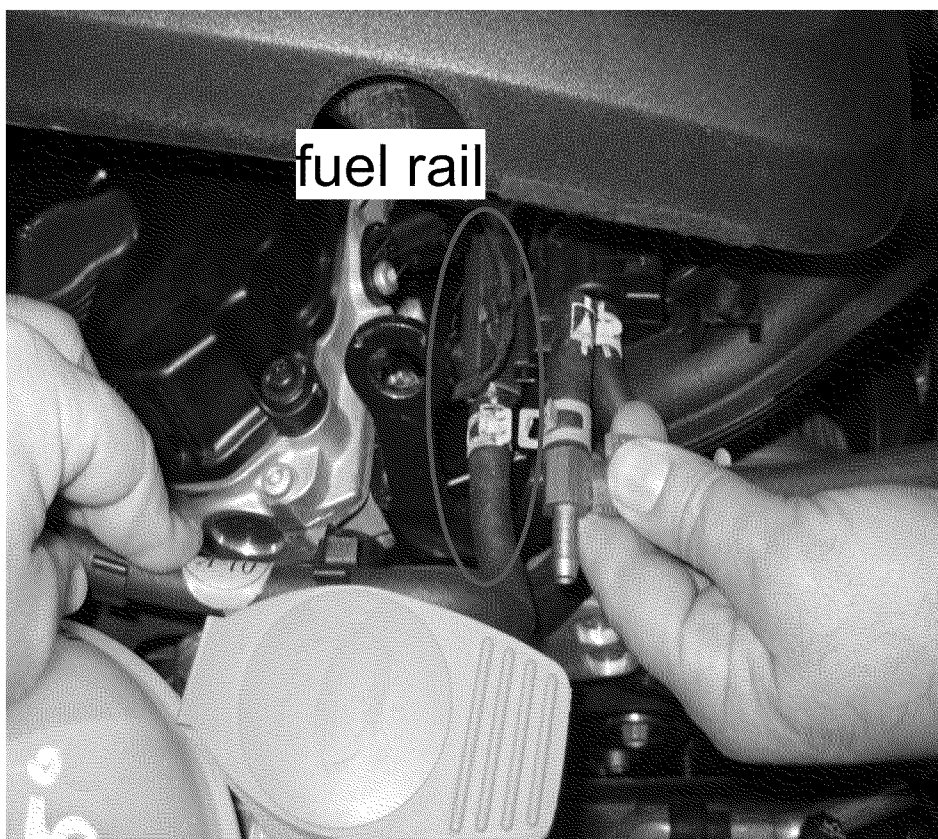
powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung



Fuel drain for vehicle preconditioning

gasoline vehicle: connection of T-piece in the fuel rail (engine compartment)



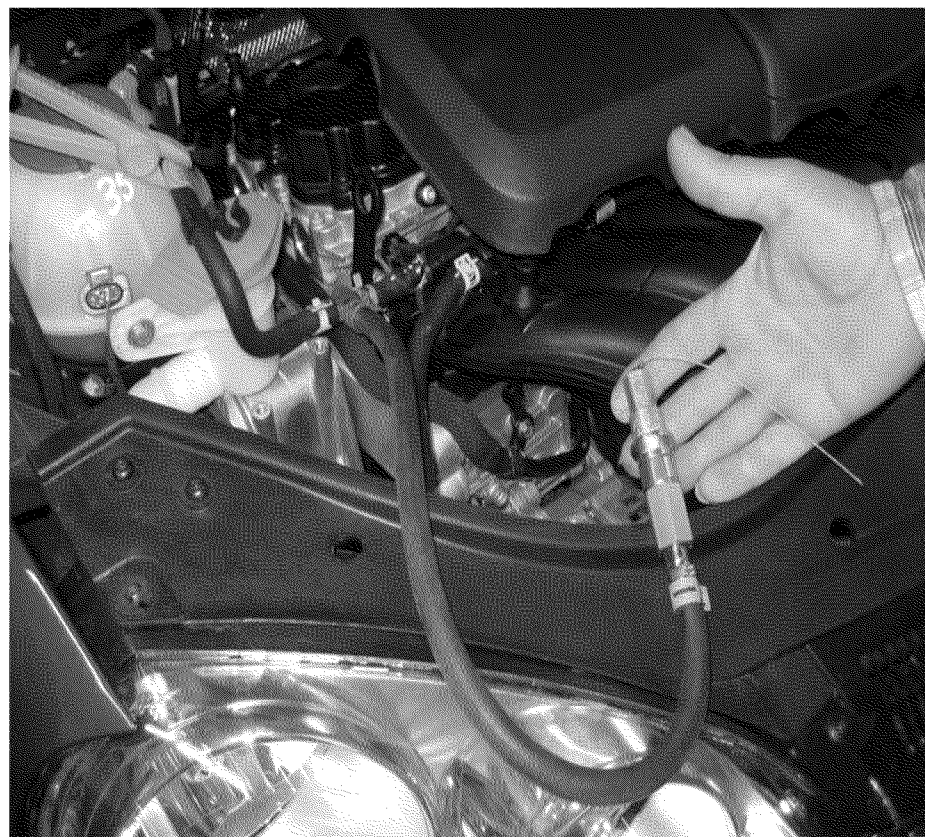
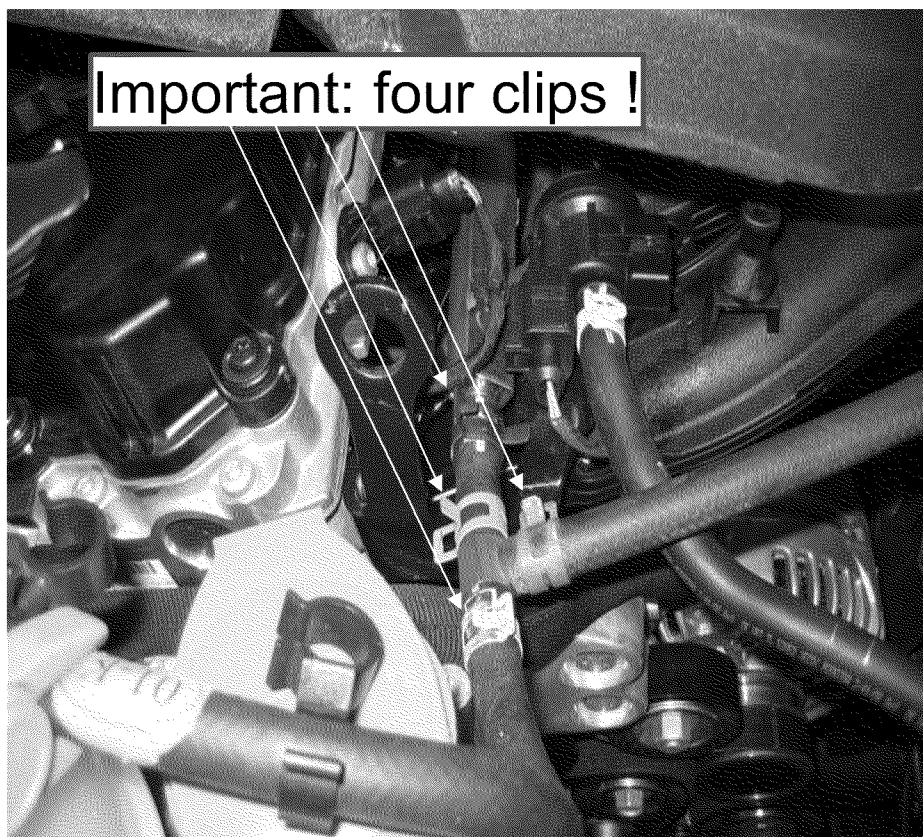
powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung



Fuel drain for vehicle preconditioning

gasoline vehicle: connection of T-piece in the fuel rail (engine compartment)



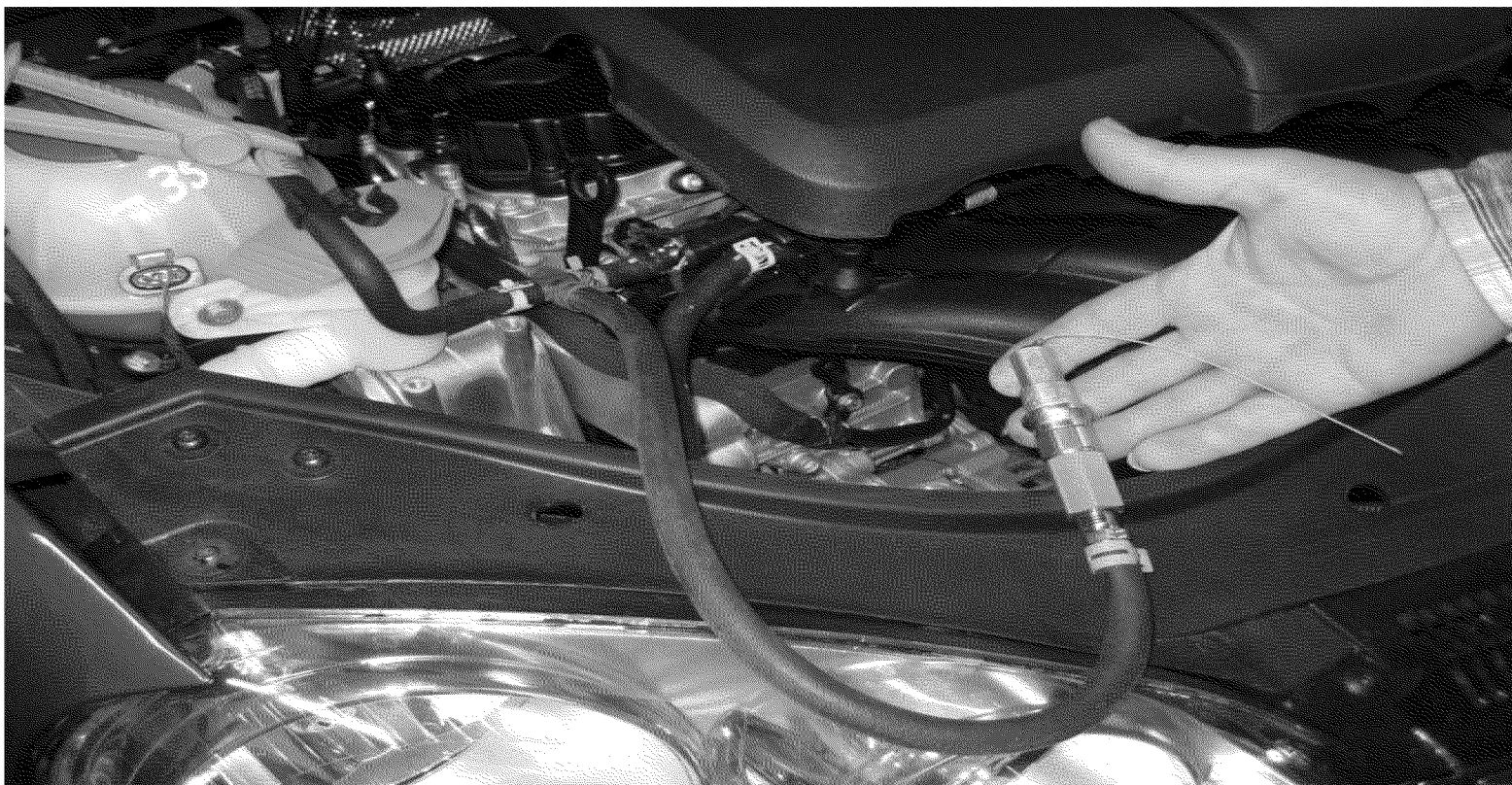
powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung



Fuel drain for vehicle preconditioning

gasoline vehicle: T-piece in the fuel rail (engine compartment) **Attention:** check all clips (four) in the fuel line before you start the engine !



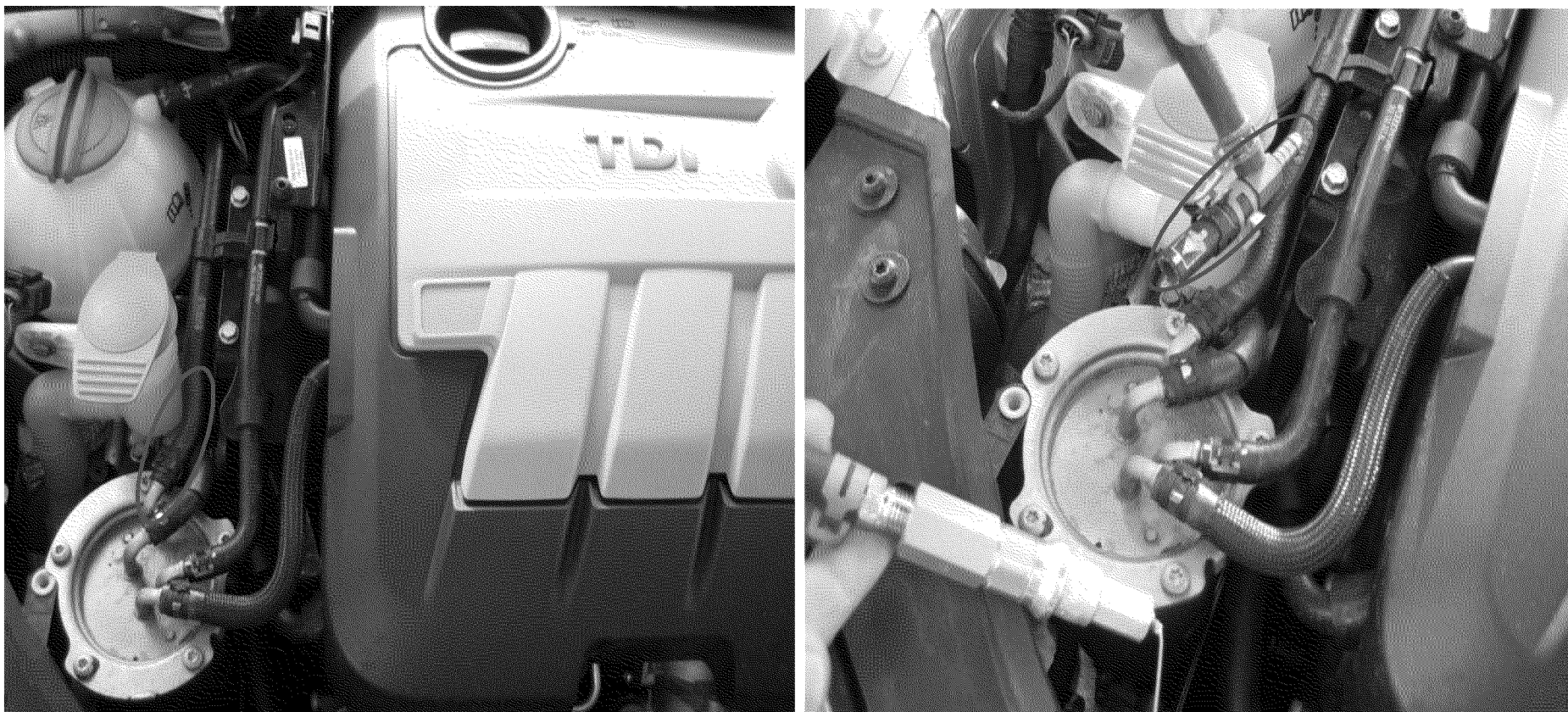
powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung



Fuel drain for vehicle preconditioning

diesel vehicle: connection of T-piece in the fuel rail (engine compartment)



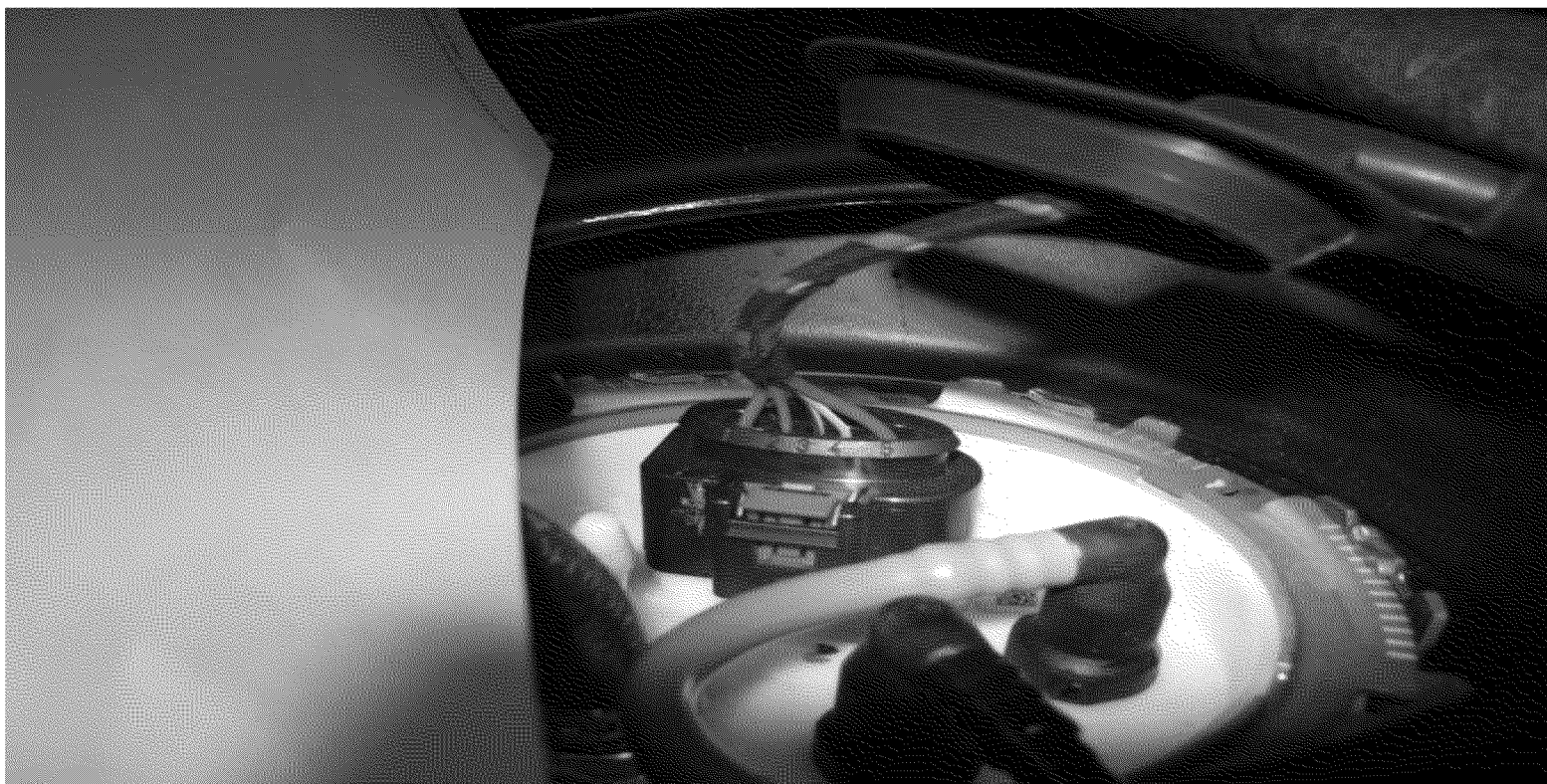
powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung



Fuel drain for vehicle preconditioning

Fuel pump, electrical connector, original part (rear seats, right hand side)



powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung



Fuel drain for vehicle preconditioning

Fuel pump, electrical connector, disconnect original part



powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung



Fuel drain for vehicle preconditioning

Fuel pump, external electrical connector with DC power supply (red wire = plus blue or brown wire = negative pole)



powertrain development

Aggregate-Testcenter ● Antriebs-Elektronik ● Antriebsstrangmanagement ● Dieselmotorenentwicklung ● Fahrzeugintegration Antrieb ● Getriebeentwicklung ● Ottomotorenentwicklung





National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

Vehicle Parameters for In-use Testing

EPA Vehicle Control Number:

Equivalent Test Weight: Pounds

Nominal Fuel Tank Capacity: Gallons **40% Fill** gallons

Drive Axle: Front, Rear or All wheel drive

Tire Pressure: PSI

Vehicle Target Road-Load Coefficients

A Lb-force

B Lb-force*mph

C Lb-force*mph²

Vehicle Set Road-Load Coefficients

A Lb-force

B Lb-force*mph

C Lb-force*mph²

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)? ☒ (Y/N)

Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

Canister Loading Process:

Fuel Draining Process:

ABS Disabling Process:

Fuel Switch Process (Flex Fuel only):

Comments:

For internal EPA Use Only:

This information was obtained from:

- * Letter, e-mail, fax or other document delivered from the manufacturer
(attach any additional information from the manufacturer to this form)
- * Verbal instruction from the manufacturer's representative
- * Other (specify)

Manufacturer Representative: _____

Date: _____

EG&G Representative: _____

Date: _____

EPA Representative: _____

Date: _____



National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

Vehicle Parameters for In-use Testing

EPA Vehicle Control Number:

Equivalent Test Weight: Pounds

Nominal Fuel Tank Capacity: Gallons **40% Fill** gallons

Drive Axle: Front, Rear or All wheel drive

Tire Pressure: PSI

Vehicle Target Road-Load Coefficients

A Lb-force

B Lb-force*mph

C Lb-force*mph²

Vehicle Set Road-Load Coefficients

A Lb-force

B Lb-force*mph

C Lb-force*mph²

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)? ☒ (Y/N)

Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

Canister Loading Process:

Fuel Draining Process:

ABS Disabling Process:

Fuel Switch Process (Flex Fuel only):

Comments:

For internal EPA Use Only:

This information was obtained from:

- * Letter, e-mail, fax or other document delivered from the manufacturer
(attach any additional information from the manufacturer to this form)
- * Verbal instruction from the manufacturer's representative
- * Other (specify)

Manufacturer Representative: _____

Date: _____

EG&G Representative: _____

Date: _____

EPA Representative: _____

Date: _____

To: "Hart, Robert (VWoA)" [Robert.Hart@vw.com]
Cc: []
Bcc: []
From: CN=Jim Snyder/OU=AA/O=USEPA/C=US
Sent: Fri 5/15/2009 1:25:07 PM
Subject: audi A3UC/0 confirmatory on hold

Bob, Yes I received your message and put it on hold as of Wednesday. I was planning to send you a note today, sorry its was really hectic this week until today.

Let me know when you are ready to re-schedule it.

Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

To: Jim Snyder/AA/USEPA/US@EPA[]
From: "Hart, Robert (VWoA)"
Sent: Thur 5/28/2009 2:25:26 PM
Subject: Upcoming Test Waiver Requests
<mailto:robert.hart@vw.com>

Hello Jim,

I took a quick look at the files.

There are two 2.0L turbo test groups with a total of 6 vehicle configurations that I will be submitting in the very near future.

Best regards,

Bob

Robert Hart

Emissions & Regulatory Analyst

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4224

Fax: 248 754 4207

<mailto:robert.hart@vw.com>

To: Jim Snyder/AA/USEPA/US@EPA[]
Cc: "Hart, Robert (VWoA)" [Robert.Hart@vw.com]
From: "Rodgers, William"
Sent: Fri 5/29/2009 2:10:33 PM
Subject: VW Test Group AVWXV02.5U35
william.rodgers@vw.com

Hello Jim,

We received your confirmatory test waiver for VID VW35100056/10 (manual trans. Configuration 0).
Thanks for your help.

As a heads, we have to correct Section 12 vehicle weights in the application recently submitted for this test group so it matches the verify vehicle data.

You should get a revised application and the pending confirmatory test supplemental information for VID VW35100052/10 (automatic trans. configuration 3) in the next few days.

Best regards,

Bill Rodgers

Engineering and Environmental Office

VOLKSWAGEN Group of America, Inc.
3800 Hamlin Rd.

Auburn Hills, MI 48436

United States

(248) 754-4219

(248) 754-4207

william.rodgers@vw.com

To: Robert.Hart@vw.com[]
Cc: CN=Ben Haynes/OU=AA/O=USEPA/C=US@EPA;CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US@EPA[]; N=Vincent Mazaitis/OU=AA/O=USEPA/C=US@EPA[]
Bcc: []
From: CN=Jim Snyder/OU=AA/O=USEPA/C=US
Sent: Mon 6/15/2009 6:26:45 PM
Subject: Rescheduled VW

The Test Lab has re-scheduled Veh# VW35100052/10 from 7/8/09 to 8/5/09 to combine travel. Same week as the Toureg veh#756 0-0012/10 is scheduled.

The VW CC Veh. 46800062/10 will be scheduled for 8/24/09 or later.

Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

To: Lynn Sohacki/AA/USEPA/US@EPA[]
Cc: "Kohnen, Christoph (VWGoA)" [christoph.kohnen@vw.com]; Johnson, Stuart" [Stuart.Johnson@vw.com]; Rhodes, Brian" [Brian.Rhodes@vw.com]
From: "Popa, Edward"
Sent: Mon 6/15/2009 7:53:46 PM
Subject: In-use vehicles scheduled for this week - Wednesday
[EPA_01_In-Use_Parameters_Form.xls](#)
[Q7_4.2Lcanisterloading.ppt](#)
[Fuel_Drain_Q7-V8FSI.ppt](#)

Hello Lynn,

Please find below and attached the test information and parameters for the upcoming EPA In-Use Surveillance Test Program -Eng. Fam. 7ADXT04.2358 and for the vehicle M158RXX-0124 (2007 Audi/Q7):

Lab: NVFEL Ann Arbor,
Michigan
Engine Family: 7ADXT04.2358
Estimated Start Date: Week-ending June 19, 2009
Recall/Testing Representative: Lynn Sohacki
Telephone Number: (734) 214-4851
E-mail address: Sohacki.Lynn@epa.gov
Class Numbers: M158/M159 (low-mileage / high-mileage)

- General Test Group Information:

Engine Fam.: 7ADXT04.2358
Concept: 4.2
Em. Standard: LEV II - BIN 5
Sales Area: 50 States / Canada
Engine HP: 350 hp
Engine Code: BAR
Models in TG: Audi Q7, Touareg
EVAP Fam.: 7ADXR0170358, 7ADXR0230276
EVAP Standard: LEV II - Tier 2
of sold vehicles in TG: 9,727

If you have any questions or need extra information for the procured vehicle please don't hesitate to contact me.

Thank you and best regards,
Edy

Edward-Fabian Popa
Manager In-Use Emission Compliance

Volkswagen Group of America, Inc.
Engineering and Environmental Office
3800 Hamlin Road

Auburn Hills, MI 48326, U.S.A.
Tel. +1 248 754 4211
Mobile: +1 248 881 4095
Fax: +1 248 754 4207
mailto:edward.popa@audi.com
http://www.vw.com
http://www.audiusa.com

-----Original Message-----

From: Sohacki.Lynn@epamail.epa.gov [mailto:Sohacki.Lynn@epamail.epa.gov]

Sent: Tuesday, June 09, 2009 9:17 AM

To: Popa, Edward

Subject: In-use vehicles scheduled for next week

Hi Edy.

Listed below is the information for the vehicles that we have scheduled for next week.

M158RXX-0124 (2007 Audi/Q7) - VIN# **Ex. 6** 0830 vehicle pick up on 6/17/09 (Wednesday)

Please send the following to me for these vehicles before pick-up.
Please use the attached form:

vehicle target road-load coefficients
fuel tank capacity
40% tank capacity
tire pressure
applicable in-use standards (Does this vehicle qualify for relaxed in-use standards as per 86.1811-04(p)?)

To avoid unnecessary delays and correspondence, please also include explicit directions and, if necessary, pictures for:

disabling traction control, stability control and any load leveling the vehicle may have
preferred method for loading the canister
preferred fuel drain method
any special starting procedures
ABS disabling instructions
for flex-fuel vehicles, the fuel switch procedure

If you have any questions, please feel free to contact me. Thank you.

Lynn Sohacki
Environmental Protection Agency
(734)214-4851
(734)214-4869 fax

(See attached file: In-Use Parameters Form.xls)



National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

Vehicle Parameters for In-use Testing

EPA Vehicle Control Number:

Equivalent Test Weight: Pounds

Nominal Fuel Tank Capacity: Gallons **40% Fill** gallons

Drive Axle: Front, Rear or All wheel drive

Tire Pressure: PSI

Vehicle Target Road-Load Coefficients

A Lb-force

B Lb-force*mph

C Lb-force*mph²

Vehicle Set Road-Load Coefficients

A Lb-force

B Lb-force*mph

C Lb-force*mph²

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)? (Y/N)

Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

Canister Loading Process:

Fuel Draining Process:

ABS Disabling Process:

Fuel Switch Process (Flex Fuel only):

Comments:

For internal EPA Use Only:

This information was obtained from:

- * Letter, e-mail, fax or other document delivered from the manufacturer
(attach any additional information from the manufacturer to this form)
- * Verbal instruction from the manufacturer's representative
- * Other (specify)

Manufacturer Representative: _____

Date: _____

EG&G Representative: _____

Date: _____

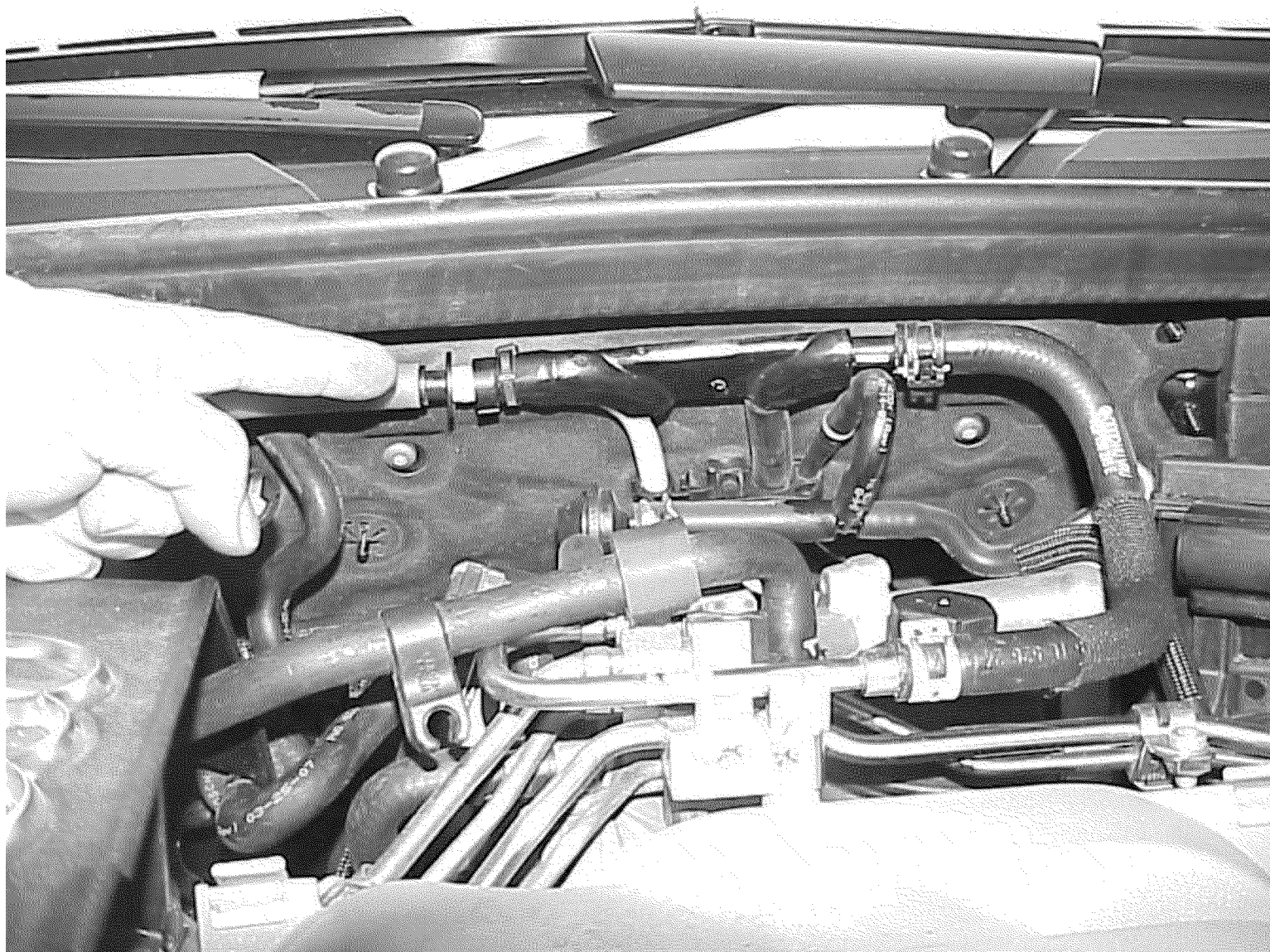
EPA Representative: _____

Date: _____

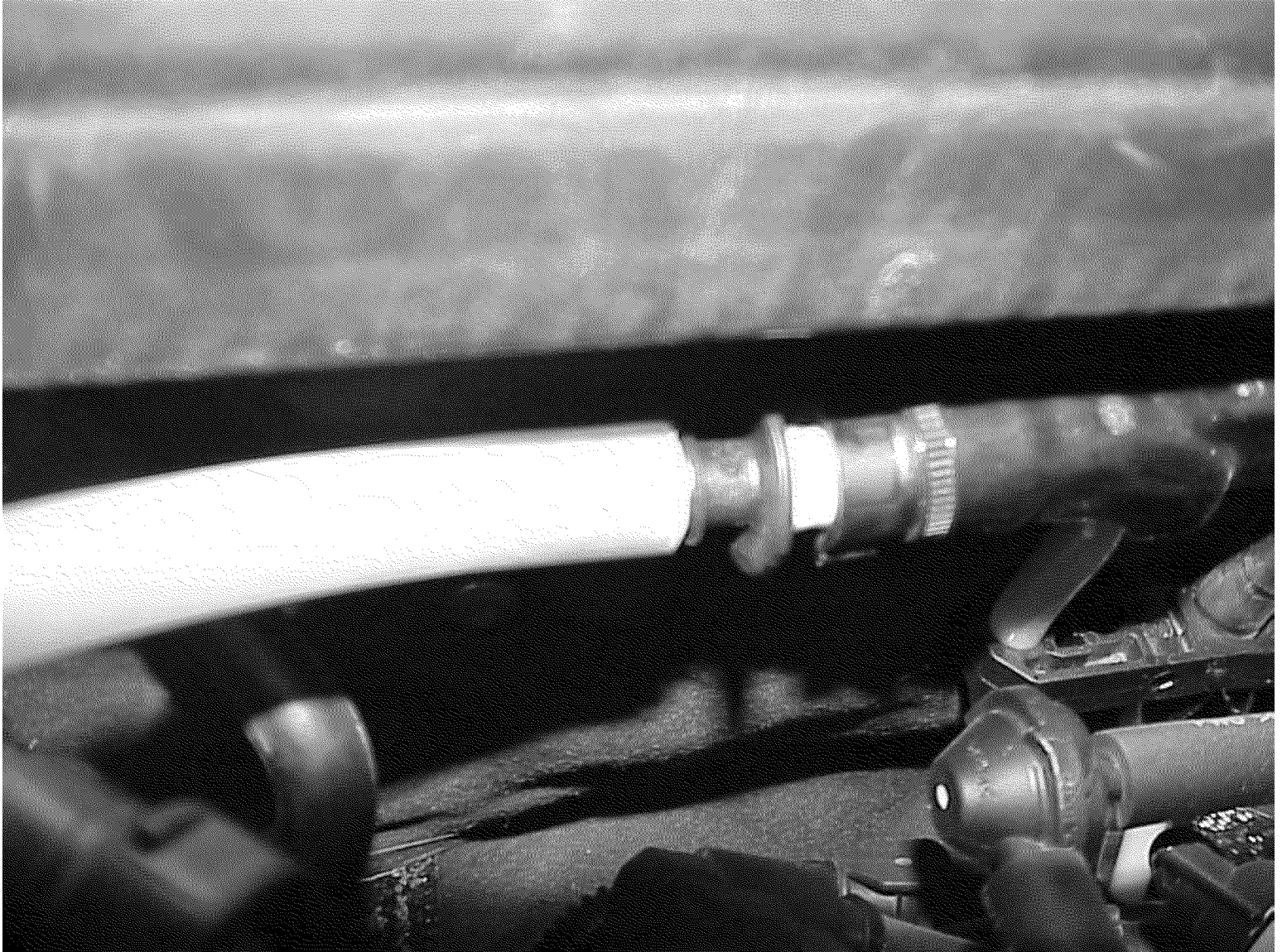
Disconnect to load canister here



Install load hose here



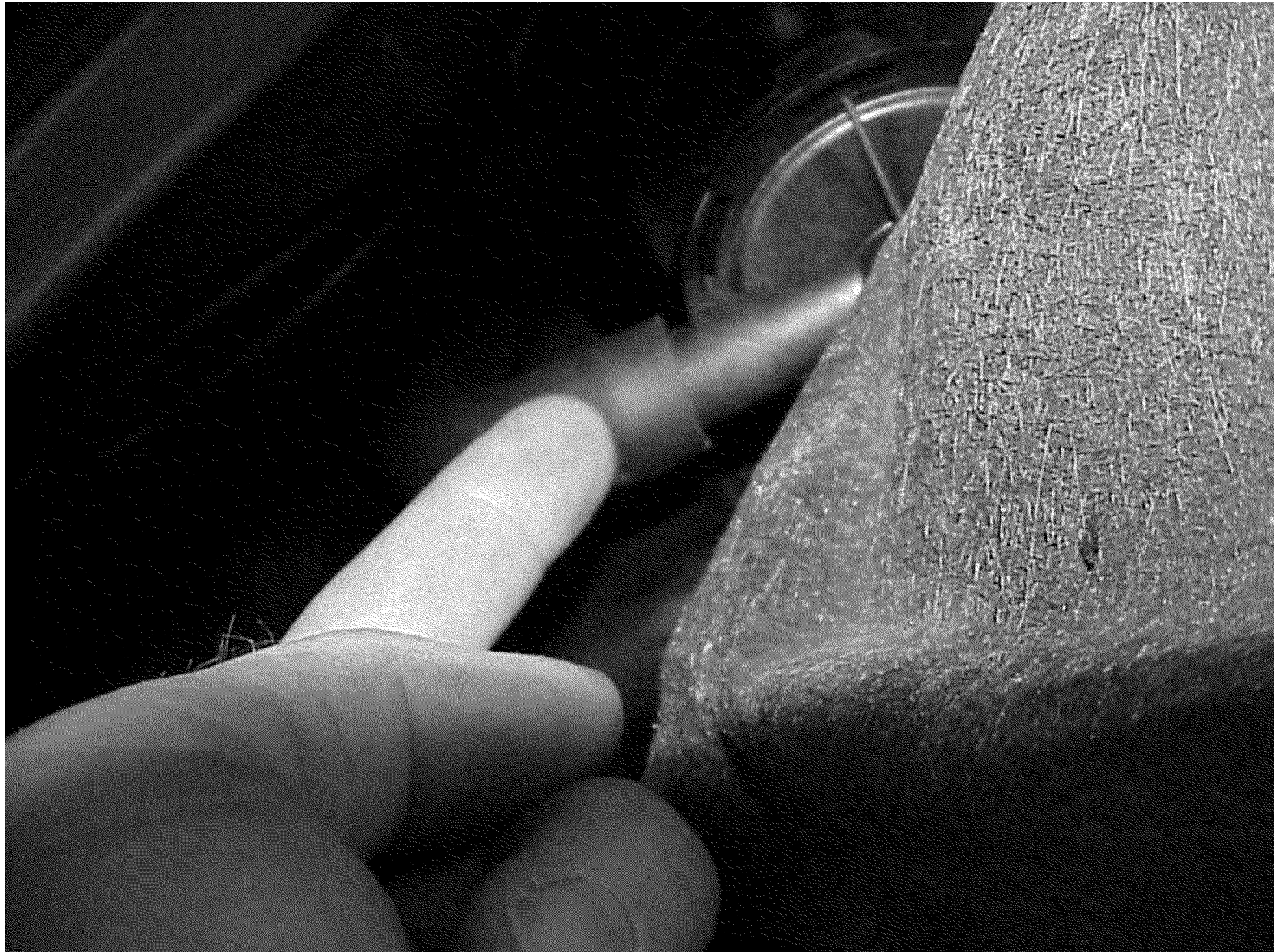
Load hose to station



Overflow open wheel well cover



Disconnect LDP hose



Connect hose for overflow to station for 2g breakthrough



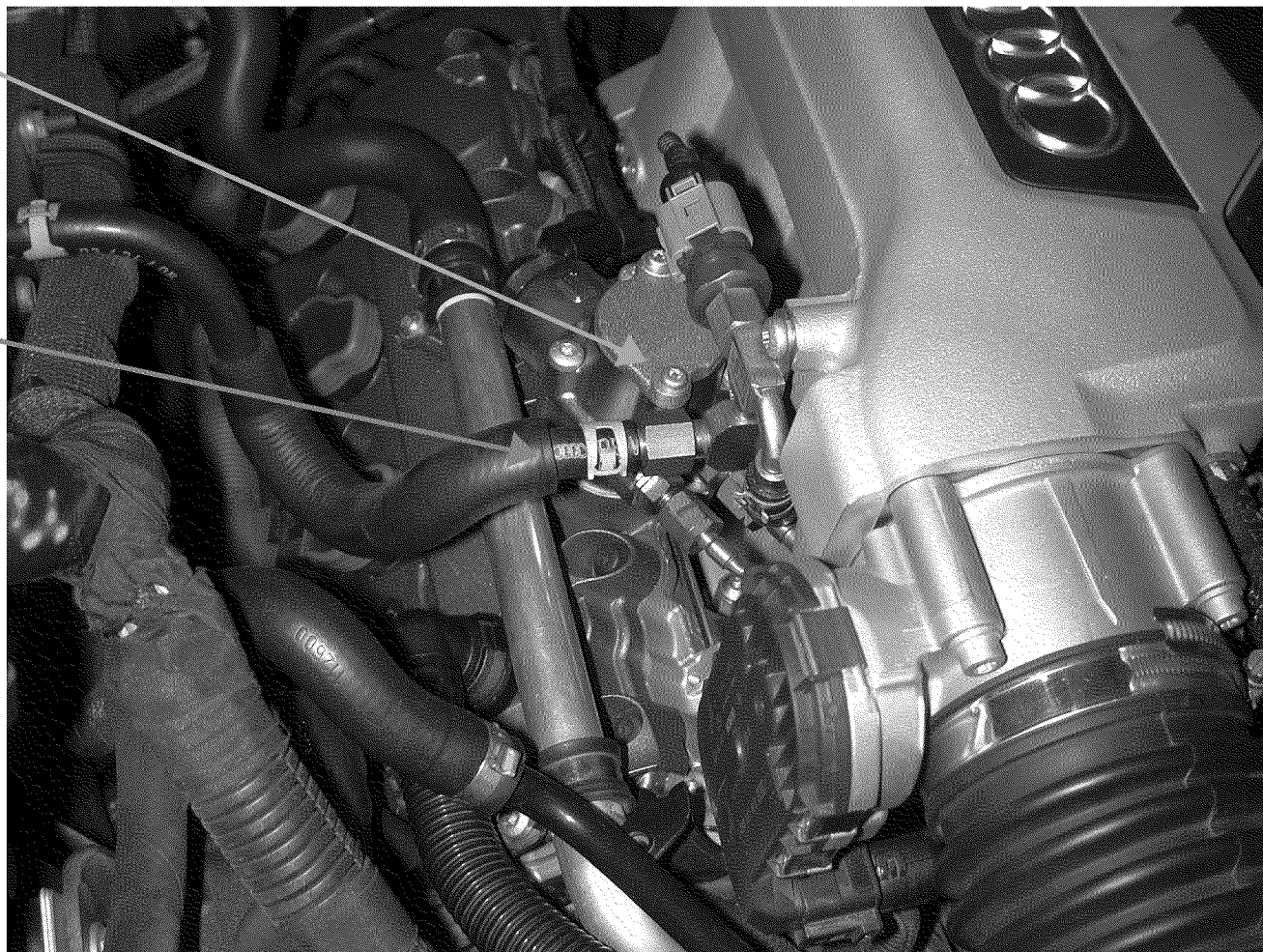
Fuel drain on V8FSI

- ▶ (1) pinch off hose to the high pressure fuel pump (system pressure apx. 6 bar)
- ▶ (2) start and run engine until it stops
- ▶ (3) conect T-piece
- ▶ (4) start and run engine until it stops

Fuel drain on V8FSI

fuel high pressure pump

hose to high pressure pump

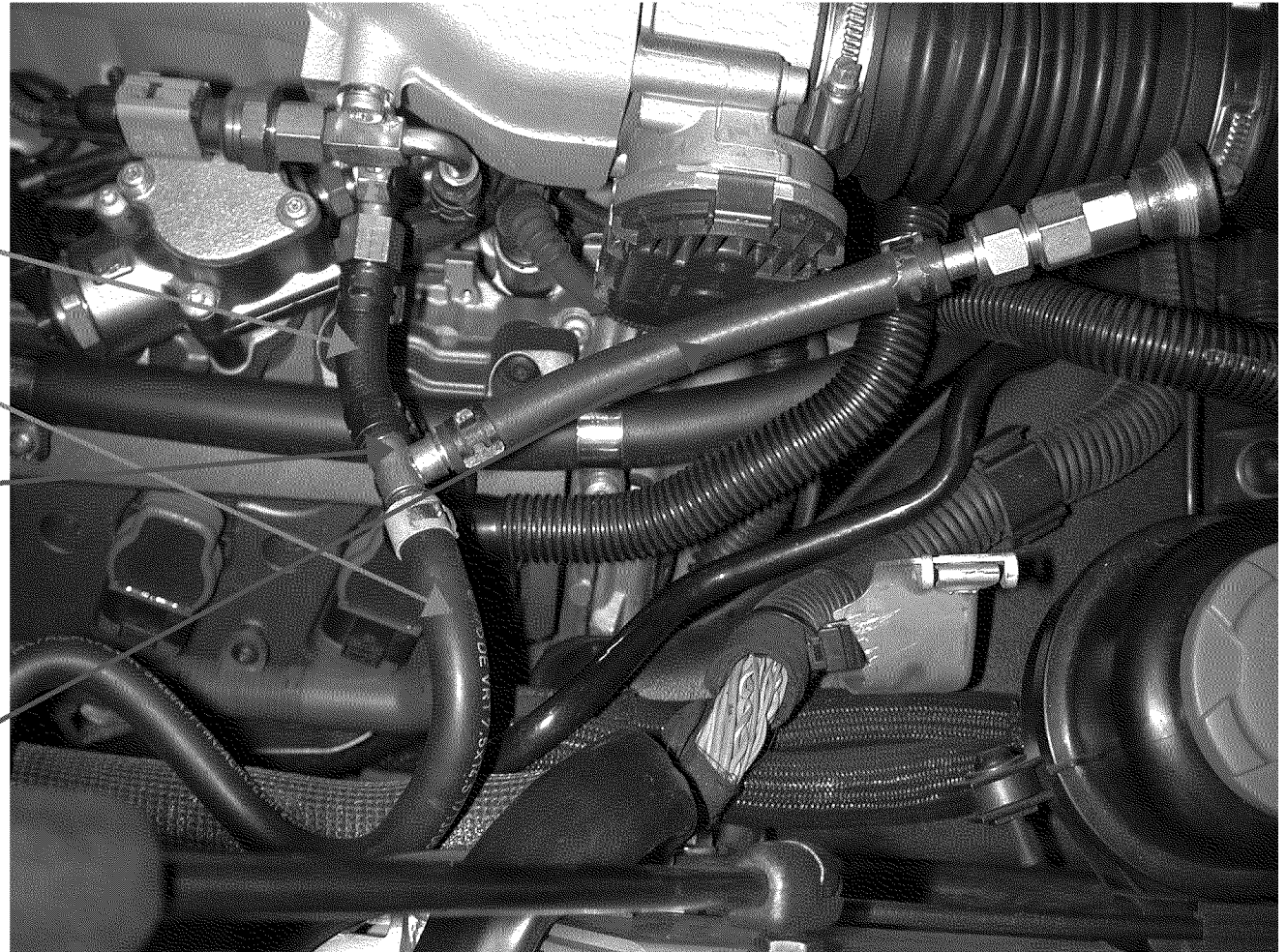


Fuel drain on V8FSI

conection to
high pressure pump

T-piece

Fuel drain hose



To: richard.thomas@vw.com[]
Cc: christoph.kohnen@vw.com>;dennis.reineke@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; ennis.reineke@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;CN=Roberts French/OU=AA/O=USEPA/C=US@EPA[]; N=Roberts French/OU=AA/O=USEPA/C=US@EPA[]
From: CN=David Good/OU=AA/O=USEPA/C=US
Sent: Thur 6/25/2009 11:16:50 PM
Subject: 2010 FE Guide data for web posting - Please review & let EPA know after the Verify data is error free and ready for posting
[2010 FEguide-Audi-VW-Lamb-Bently-w-sales-all rel dates-06-24-09.xls](#)

Richard,

Attached is an Excel Spreadsheet with the 2010 FE data from EPA's Verify data base as of June 24, 2009. Please review the spread sheet and confirm for your records that the data are correct. Please make sure that the release date is accurate for the models listed. Please double check any new entries into Verify to make sure they are error free. Any changes should be made directly in the Verify database. [Do not correct the spreadsheet and send it back.]

The last date to make changes is July 7, 2009. EPA will review the data on July 8 and forward it to DOE on July 9 for posting on the web on July 15, 2009.

Regards

----- Forwarded by David Good/AA/USEPA/US on 06/24/2009 10:19 AM -----

From: David Good/AA/USEPA/US
To:
Cc:
Date: 06/19/2009 08:26 PM
Subject: 2010 FE Guide - Schedule for the July, 2009 web release

To manufacturers,

Here's the schedule for the July, 2009 web update for the 2010 FE Guide at www.fueleconomy.gov & Green Vehicle Guide.

Date	Action
June 23 (Tues)	EPA staff performs 2010 FE Guide query (separated by mfr, etc) for EPA review
June 24 (Wed)	EPA sends FE Guide data to manufacturers for review & corrections
June 24-July 7	Mfrs review & make corrections

July 7 (Tues) Last day for mfr corrections and data entry
July 7 (Wed) EPA staff performs 2010 FE Guide query for EPA review
July 9 (Th) EPA sends final data to DOE
July 15 (Wed) DOE publishes 2010 FE Guide data on web

Reminders:

Release date: Please be sure the release dates are correct for your 2010 FE labels. We will post the early-introduction 2010 models on the web which have release dates of July 15 or earlier. This is especially important if the Supplemental Appropriations Act of 2009 (H.R. 2346) is signed.

Transmission & Gas Guzzler Fields: Please double check the transmission and gas guzzler fields in the attached spreadsheet (called "Trans as listed in FE Guide (derived from col X thru AC)" and "Guzzler?" in the attached spreadsheet). These fields were derived by EPA (and not directly input to Verify by manufacturers).

Minivan Classification: Please continue to use the minivan guidance provided in CISD-07-08 (and do not use the 180 cubic feet interior volume specification in the regulations).

Flexible-fueled and Dual Fuel Vehicles: For flexible-fueled and dual fuel vehicles, please enter data for both fuels in the same model type index---by clicking on the buttons to "Add Another Fuel Usage" and "Add another Base Level Fuel Usage." Then, for example, enter the gasoline test data in "Base Level Fuel Usage #1" and the E85 test data in "Base Level Fuel Usage #2." Please don't enter the gasoline and alternative fuel data using two separate index numbers.

Similar Model Types which need a Basic Engine Descriptor: If you need to enter a basic engine descriptor (so that customers can easily identify two otherwise identical model types, please enter the descriptor in the Verify "Manufacturer Fuel Economy Label Comments" field. Please be clear and concise about the information added in the comment field, for example: Engine descriptor "4-valve" needed for this model type. Please be sure to re-enter that comment for any subsequent corrections or updates to that index.

Fuel Costs: Until new fuel costs are provided to manufacturers in a future EPA guidance letter, manufacturers should use the 2009-2010 model year fuel costs provided in CISD-09-08. The new fuel costs will be provided in a future EPA guidance letter in June or July, 2009.

Range of comparable vehicles: Until the 2010 ranges (for the various classes of vehicles) are provided in a future EPA guidance letter, manufacturers should continue to use the 2009 model year ranges provided in CISD-08-12 (except if a model exceeds the 2009 range values, the manufacturer should extend the range appropriately); ref 40 CFR 600.306-08(b)(1).

Head up on Supplemental Appropriations Act of 2009 (H.R. 2346): Title XIII (Consumer Assistance to Recycle and Save Program) of this bill contains a section which provides incentives to consumers for purchasing new vehicles. [It is commonly referred to as the "Cash for Clunkers bill" in the press.] If these provisions of the bill are signed into law, we may have to make some changes to the www.fueleconomy.gov website, including updating the website more often. For example, we may have to update the 2010 models listed on www.fueleconomy.gov on a weekly basis.

If you have any questions, feel free to give your team member or me a call. I'm at 734-214-4450.

Regards

EPA comme	VERIFY	Mode	Mfr Name	Division	Carline	Verif	Index (Eng
		2010	Audi	Audi	A3	ADX	46 2.0
		2010	Audi	Audi	A3	ADX	47 2.0
		2010	Audi	Audi	A3 QUATTRO	ADX	43 2.0
		2010	Audi	Audi	A4	ADX	18 2.0
		2010	Audi	Audi	A4 AVANT QUATTRO	ADX	20 2.0
		2010	Audi	Audi	A4 QUATTRO	ADX	24 2.0
		2010	Audi	Audi	A4 QUATTRO	ADX	21 2.0
		2010	Audi	Audi	A5 Cabriolet	ADX	19 2.0
		2010	Audi	Audi	A5 Cabriolet quattr	ADX	23 2.0
		2010	Audi	Audi	A5 QUATTRO	ADX	25 2.0
		2010	Audi	Audi	A5 QUATTRO	ADX	22 2.0
		2010	Audi	Audi	A6 AVANT QUATTRO	ADX	35 3.0
		2010	Audi	Audi	A6 QUATTRO	ADX	34 3.0
		2010	Audi	Audi	A6 QUATTRO	ADX	8 4.2
		2010	Audi	Audi	A8	ADX	7 4.2
		2010	Audi	Audi	A8 L	ADX	6 4.2
		2010	Audi	Audi	Q5	ADX	48 3.2
		2010	Audi	Audi	Q7	ADX	11 4.2
		2010	Audi	Audi	R8	ADX	33 4.2
		2010	Audi	Audi	R8	ADX	32 4.2
		2010	Audi	Audi	R8	ADX	16 5.2
		2010	Audi	Audi	R8	ADX	17 5.2
		2010	Audi	Audi	S4	ADX	36 3.0
		2010	Audi	Audi	S4	ADX	37 3.0
		2010	Audi	Audi	S5	ADX	10 4.2
		2010	Audi	Audi	S5	ADX	9 4.2
		2010	Audi	Audi	S5 Cabriolet	ADX	38 3.0
		2010	Audi	Audi	S6	ADX	42 5.2
Potential err	Y	2010	Audi	Audi	TT COUPE QUATTRO	ADX	44 2.0
Potential err	Y	2010	Audi	Audi	TT ROADSTER QUATTRO	ADX	45 2.0
		2010	Audi	Lamborghini	Gallardo Coupe	ADX	12 5.2
		2010	Audi	Lamborghini	Gallardo Coupe	ADX	14 5.2
		2010	Audi	Lamborghini	Gallardo Spyder	ADX	13 5.2
Annual fuel c	Y	2010	Audi	Lamborghini	Gallardo Spyder	ADX	15 5.2
		2010	Audi	Volkswagen	EOS	ADX	57 2.0
		2010	Audi	Volkswagen	GTI	ADX	56 2.0
		2010	Audi	Volkswagen	JETTA	ADX	55 2.0
		2010	Audi	Volkswagen	PASSAT CC	ADX	58 2.0
		2010	Audi	Volkswagen	PASSAT CC	ADX	53 2.0
		2010	Audi	Volkswagen	TIGUAN	ADX	51 2.0
		2010	Audi	Volkswagen	TIGUAN	ADX	50 2.0
		2010	Audi	Volkswagen	TIGUAN 4MOTION	ADX	49 2.0
		2010	Bentley	Bentley Motors L	Continental Flying Spur	BEX	40 6.0
		2010	Bentley	Bentley Motors L	Continental GT	BEX	41 6.0
		2010	Bentley	Bentley Motors L	Continental GTC	BEX	39 6.0
		2010	Lamborghini	Lamborghini	MURCIELAGO	NLX	4 6.5
		2010	Lamborghini	Lamborghini	MURCIELAGO	NLX	2 6.5
		2010	Lamborghini	Lamborghini	MURCIELAGO ROADSTER	NLX	5 6.5
		2010	Lamborghini	Lamborghini	MURCIELAGO ROADSTER	NLX	3 6.5
		2010	Volkswagen	Volkswagen	PASSAT	VWX	52 2.0
		2010	Volkswagen	Volkswagen	PASSAT WAGON	VWX	54 2.0

#	Trans as listed	City	Hwy	Con	Low	Low	Low	City	Una	Hwy	Una	Comb	Ur	City	5-Cycle	Hwy	5-Cyc	Comb	5-Cy
	4 Manual(M6)	21	30	24				25.2906	40.4003	30.4083		20.7906		30				24.123	
	4 Auto(S6)	22	28	24				27.0473	38.8702	31.3364		21.5629		27.723				23.9585	
	4 Auto(S1)	21	28	24				27.2	37.1	30.9119		20.9		28.1				23.6239	
	4 Auto(AV)	23	30	26				29.2373	42.7743	34.0926									
	4 Auto(S6)	21	27	23				25.9563	37.7989	30.2164									
	4 Manual(M6)	22	30	25				27.6402	42.575	32.8212									
	4 Auto(S6)	21	27	23				25.9563	37.7989	30.2164									
	4 Auto(AV)	23	30	26				29.2373	42.7743	34.0926									
	4 Auto(S6)	20	26	23				25.9	37	29.9422									
	4 Manual(M6)	22	30	25				27.6402	42.575	32.8212									
	4 Auto(S6)	21	27	23				25.9563	37.7989	30.2164									
	6 Auto(S6)	18	26	21				21.7553	34.7286	26.1514		17.6		25.9				20.6407	
	6 Auto(S6)	18	26	21				21.7553	34.7286	26.1514		17.6		25.9				20.6407	
	8 Auto(S6)	16	23	18				19.8911	31.5002	23.8458									
	8 Auto(S6)	16	23	18				19.8911	31.5002	23.8458									
	8 Auto(S6)	16	23	18				19.8911	31.5002	23.8458									
	6 Auto(S1)	18	23	20				22.7	30.7	25.7155		17.8		22.9				19.7826	
	8 Auto(S6)	13	18	15				16.2	24.6	19.1412									
	8 Manual(M6)	12	19	15				15.3	26.8	18.9614									
	8 Auto(S6)	13	18	15				15.4	25.0451	18.6283									
	10 Auto(AM6)	13	20	16				15.8	24.8	18.8839		13.3		19.5				15.5206	
	10 Manual(M6)	12	20	15				13.7	23.9	16.9565		11.9		19.9				14.5282	
	6 Manual(M6)	18	27	21				21.5	34.1	25.7879		17.8		26.7				20.9412	
	6 Auto(S7)	18	28	21				21.6	35	26.096		17.7		27.8				21.1593	
	8 Manual(M6)	14	22	17				17.3	29.3	21.2088		14.3		21.9				16.9464	
	8 Auto(S6)	16	24	19				20.4	31	24.1098		16.5		24.2				19.2573	
	6 Auto(S7)	17	26	20				20.3	34	24.7961		16.7		26.1				19.93	
	10 Auto(S6)	14	19	16				17.2	26.7	20.4789									
Y;	4 Auto(S1)	21	29	24				27.5267	39.7256	31.9404		21.2766		29.052				24.1899	
y;	4 Auto(S1)	21	29	24				27.5267	39.7256	31.9404		21.2766		29.052				24.1899	
	10 Auto(AM6)	14	20	16				16.1	25.4	19.276		13.5		19.8				15.756	
	10 Manual(M6)	12	20	15				14	24	17.2308		12.1		20				14.7157	
	10 Auto(AM6)	13	20	16				16	25.4	19.197		13.4		19.8				15.6809	
	10 Manual(M6)	12	20	14				13	22.6	16.0722		11.5		19.5				14.1038	
	4 Manual(M6)	21	31	25				26.0818	41.5181	31.3223		21.1025		30.8701				24.606	
	4 Manual(M6)	21	31	25				26.0818	41.5181	31.3223		21.1025		30.8701				24.606	
	4 Manual(M6)	21	31	25				26.0818	41.5181	31.3223		21.1025		30.8701				24.606	
	4 Manual(M6)	21	31	25				26.0818	41.5181	31.3223		21.1025		30.8701				24.606	
	4 Auto(S6)	22	31	25				27.1189	42	32.2629		21.9904		30.747				25.2229	
	4 Manual(M6)	19	26	21				23.3	36.2	27.75									
	4 Auto(S6)	18	24	21				22.9	34.1	26.8716									
	4 Auto(S6)	18	24	20				22.5	33.3	26.3449									
	12 Auto(S6)	10	17	12				12.5281	23.2715	15.8132									
	12 Auto(S6)	10	17	13				12.8	23.8	16.1613									
	12 Auto(S6)	10	17	12				12.5281	23.2715	15.8132									
	12 Auto(AM6)	9	14	11				10.9	19.9	13.6852									
	12 Manual(M6)	8	13	10				10.1	17.5	12.4735									
	12 Auto(AM6)	9	14	11				10.9	19.9	13.6852									
	12 Manual(M6)	8	13	10				10.1	17.5	12.4735									
	4 Auto(S6)	22	31	25				27.1189	42	32.2629		21.9904		30.747				25.2229	
	4 Auto(S6)	22	31	25				27.1189	42	32.2629		21.9904		30.747				25.2229	

Engine	Fuel	Air Aspiration Method	Trans	Trans Desc
	TC	Turbocharged	M	Manual
	TC	Turbocharged	SA	Semi-Automatic
	TC	Turbocharged	SA	Semi-Automatic
	TC	Turbocharged	CVT	Continuously Variable
	TC	Turbocharged	SA	Semi-Automatic
	TC	Turbocharged	M	Manual
	TC	Turbocharged	SA	Semi-Automatic
	TC	Turbocharged	CVT	Continuously Variable
	TC	Turbocharged	SA	Semi-Automatic
	TC	Turbocharged	M	Manual
	TC	Turbocharged	SA	Semi-Automatic
	SC	Supercharged	SA	Semi-Automatic
	SC	Supercharged	SA	Semi-Automatic
	NA	Naturally Aspirated	SA	Semi-Automatic
	NA	Naturally Aspirated	SA	Semi-Automatic
	NA	Naturally Aspirated	SA	Semi-Automatic
	NA	Naturally Aspirated	SA	Semi-Automatic
	NA	Naturally Aspirated	SA	Semi-Automatic
G	NA	Naturally Aspirated	M	Manual
G	NA	Naturally Aspirated	SA	Semi-Automatic
G	NA	Naturally Aspirated	AM	Automated Manual
G	NA	Naturally Aspirated	M	Manual
	SC	Supercharged	M	Manual
	SC	Supercharged	SA	Semi-Automatic
G	NA	Naturally Aspirated	M	Manual
	NA	Naturally Aspirated	SA	Semi-Automatic
	SC	Supercharged	SA	Semi-Automatic
G	NA	Naturally Aspirated	SA	Semi-Automatic
	TC	Turbocharged	SA	Semi-Automatic
	TC	Turbocharged	SA	Semi-Automatic
G	NA	Naturally Aspirated	AM	Automated Manual
G	NA	Naturally Aspirated	M	Manual
G	NA	Naturally Aspirated	AM	Automated Manual
G	NA	Naturally Aspirated	M	Manual
	TC	Turbocharged	M	Manual
	TC	Turbocharged	M	Manual
	TC	Turbocharged	M	Manual
	TC	Turbocharged	M	Manual
	TC	Turbocharged	SA	Semi-Automatic
	TC	Turbocharged	M	Manual
	TC	Turbocharged	SA	Semi-Automatic
	TC	Turbocharged	SA	Semi-Automatic
G	TC	Turbocharged	SA	Semi-Automatic
G	TC	Turbocharged	SA	Semi-Automatic
G	TC	Turbocharged	SA	Semi-Automatic
G	NA	Naturally Aspirated	AM	Automated Manual
G	NA	Naturally Aspirated	M	Manual
G	NA	Naturally Aspirated	AM	Automated Manual
G	NA	Naturally Aspirated	M	Manual
	TC	Turbocharged	SA	Semi-Automatic
	TC	Turbocharged	SA	Semi-Automatic

Trans, Other	# Gears	Trans Lockup	Trans Creeper Gear	Drive Sys	Drive Desc
	6N	N		F	2-Wheel Drive, Front
	6N	N		F	2-Wheel Drive, Front
	1N	N		A	All Wheel Drive
	1N	N		F	2-Wheel Drive, Front
	6Y	N		A	All Wheel Drive
	6Y	N		A	All Wheel Drive
	6Y	N		A	All Wheel Drive
	1N	N		F	2-Wheel Drive, Front
	6Y	N		A	All Wheel Drive
	6Y	N		A	All Wheel Drive
	6Y	N		A	All Wheel Drive
	6Y	N		A	All Wheel Drive
	6Y	N		A	All Wheel Drive
	6Y	N		A	All Wheel Drive
	1N	N		A	All Wheel Drive
	6Y	N		A	All Wheel Drive
	6Y	N		A	All Wheel Drive
	6Y	N		A	All Wheel Drive
	6N	N		A	All Wheel Drive
	6N	N		A	All Wheel Drive
	6N	N		A	All Wheel Drive
	7N	N		A	All Wheel Drive
	6N	N		A	All Wheel Drive
	6Y	N		A	All Wheel Drive
	7N	N		A	All Wheel Drive
	6N	N		A	All Wheel Drive
	1N	N		A	All Wheel Drive
	1N	N		A	All Wheel Drive
	6Y	N		A	All Wheel Drive
	6N	N		A	All Wheel Drive
	6N	N		A	All Wheel Drive
	6N	N		A	All Wheel Drive
	6N	N		F	2-Wheel Drive, Front
	6N	N		F	2-Wheel Drive, Front
	6N	N		F	2-Wheel Drive, Front
	6N	N		F	2-Wheel Drive, Front
	6N	N		F	2-Wheel Drive, Front
	6N	N		F	2-Wheel Drive, Front
	6N	N		A	All Wheel Drive
	6Y	N		A	All Wheel Drive
	6Y	N		A	All Wheel Drive
	6Y	N		A	All Wheel Drive
	6N	N		A	All Wheel Drive
	6N	N		A	All Wheel Drive
	6N	N		A	All Wheel Drive
	6N	N		A	All Wheel Drive
	6N	N		F	2-Wheel Drive, Front
	6N	N		F	2-Wheel Drive, Front

Primary Basic Engine/Testgroup	Max Ethanol %	Max Biodiesel %	Range1 - Model Type Driving
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AADXV02.03UA			
AADXV02.03UA			
AADXV02.03UA			
AADXV02.03UB			
AADXV02.03UB			
AADXV02.03UB			
AADXV02.03UB			
AADXV02.03UB			
AADXV02.03UB			
AADXV02.03UB			
AADXV03.03UF			
AADXV03.03UF			
AADXV04.2365			
AADXV04.2365			
AADXV04.2365			
AADXJ03.23UC			
AADXT04.23UD			
AADXV04.2375			
AADXV04.2375			
AADXV05.2LR8			
AADXV05.2LR8			
AADXV03.03UF			
AADXV03.03UF			
AADXV04.2365			
AADXV04.2365			
AADXV03.03UF			
AADXV05.2385			
AADXV02.03UA			
AADXV02.03UA			
AADXV05.2LR8			
AADXV05.2LR8			
AADXV05.2LR8			
AADXV05.2LR8			
AVWXV02.03UA			
AADXV02.03UA			
AADXV02.03UA			
AADXV02.03UA			
AADXV02.03UA			
AADXV02.03UA			
AADXV02.03UA			
AADXV02.03UA			
ABEXV06.0501			
ABEXV06.0501			
ABEXV06.0501			
ANLXV06.5474			
ANLXV06.5474			
ANLXV06.5474			
ANLXV06.5474			
AVWXV02.03UA			
AVWXV02.03UA			

[illegible]

Gas Guzzler Exempt Desc	2Dr Pass Vol	2Dr Lugg Vol	4Dr Pass Vol	4Dr Lugg Vol	Htchbk Pass Vol
Not exempt			89	20	
Not exempt			89	20	
Not exempt			89	20	
Not exempt			91	12	
Not exempt			90	28	
Not exempt			91	12	
Not exempt			91	12	
Not exempt	81	10			
Not exempt	81	10			
Not exempt	84	12			
Not exempt	84	12			
Not exempt			99	34	
Not exempt			98	16	
Not exempt			98	16	
Not exempt			100	15	
Not exempt			107	15	
Truck					
Truck					
Not exempt					
Not exempt					
Not exempt					
Not exempt					
Not exempt			90	13	
Not exempt			90	13	
Not exempt	84	12			
Not exempt	84	12			
Not exempt	81	10			
Not exempt			98	16	
Not exempt					74
Not exempt					
Not exempt					
Not exempt					
Not exempt					
Not exempt	77	11			
Not exempt					94
Not exempt			91	16	
Not exempt			94	13	
Not exempt			94	13	
Truck					
Truck					
Truck					
Not exempt	102	13			
Not exempt	89	11			
Not exempt	86	7			
Not exempt					
Not exempt					
Not exempt					
Not exempt					
Not exempt			96	14	
Not exempt			97	36	

Htchbk Lugg Vol	Annual Fuel1 Cos	EPA Calculated A	Comment - Model Type Desc	City2 FE (Guide
	1314	1314		
	1314	1314		
	1314	1314		
	1213	1213		
	1370	1370		
	1260	1260		
	1370	1370		
	1213	1213		
	1370	1370		
	1260	1260		
	1370	1370		
	1499	1499		
	1499	1499		
	1751	1751		
	1751	1751		
	1751	1751		
	1575	1575		
	2101	2101		
	2101	2101		
	2101	2101		
	1969	1969	SC03 and Cold CO tests are from Audi R8 configuration	
	2101	2101	SC03 and Cold CO tests are from Audi R8 configuration	
	1499	1499		
	1499	1499	Corrected trans code to S7	
	1852	1852		
	1657	1657		
	1575	1575		
	1969	1969		
13	1314	1314		
	1314	1314		
	1969	1969	SC03 and Cold CO tests are originally from worse case A	
	2101	2101	SC03 and Cold CO tests are from Audi R8 worse case c	
	1969	1969	SC03 and Cold CO tests are from Audi R8 worse case c	
	2101	2101	2249SC03 and Cold CO tests are from Audi R8 worse case c	
	1260	1260		
15	1260	1260		
	1260	1260	corrected manuf code	
	1260	1260		
	1260	1260	CORRECTED SALES VOLUME FOR THIS CC MODEL	
	1499	1499	corrected to use derived 5-cycle method for label	
	1499	1499	corrected to use derived 5-cycle label method	
	1575	1575	changed to derived 5 cycle label calculation	
	2624	2624		
	2422	2422		
	2624	2624	Added more base level information.	
	2863	2863	corrected to automated manual trans	
	3150	3150		
	2863	2863	corrected to automated manual trans	
	3150	3150		
	1260	1260	CORRECTED DATA SUB TO NO SUB FOR ALL TEST	
	1260	1260		

may be for EPA use only. Low'd City2 - VLow'd Hwy2 - VLow'd Comb2 - City2 Unadj Fue

0 of veh 9LR8-RAQ used in Lamborghini 5 cycle labels. Transmission lock-up corrected to "no". corrected to autom
0 of veh 9LR8-RMQ used in Lamborghini 5 cycle labels.

udi R8 configuration 0 of veh 9LR8-RAQ. corrected to automated manual trans
onfiguration 0 of veh 9LR8-RMQ.
onfiguration 0 of veh 9LR8-RAQ. corrected ETW and IW to 4000lbs corrected to automated manual trans
onfiguration 0 of veh 9LR8-RMQ.

S

City2 Fuel 5-Cy Hwy2 Fuel 5-Cy Comb2 Fuel 5-C Range2 - Alt Fu

ated manual trans

Fuel2	Range	Fuel2 Unit - Alt	Fuel2 Unit Desc	Fuel2 Annual Fi	Fuel2 EPA Calc
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Engine Descriptor (401)	Intake Valves Per Cyl	Exhaust Valves Per Cyl	Carline Class
	2	2	7
	2	2	7
	2	2	7
	2	2	4
	2	2	7
	2	2	4
	2	2	4
	2	2	3
	2	2	3
	2	2	3
	2	2	3
	2	2	8
	2	2	5
	2	2	5
	2	2	5
	2	2	6
	2	2	23
	2	2	23
	2	2	1
	2	2	1
	2	2	1
	2	2	1
	2	2	4
	2	2	4
	2	2	3
	2	2	3
	2	2	3
	2	2	5
	2	2	3
	2	2	1
	2	2	1
	2	2	1
	2	2	1
	2	2	1
	2	2	1
	2	2	3
	2	2	3
	2	2	4
	2	2	4
	2	2	4
	2	2	4
	2	2	4
	2	2	22
	2	2	22
	2	2	23
	2	2	5
	2	2	4
	2	2	3
	2	2	1
	2	2	1
	2	2	1
	2	2	1
	2	2	5
	2	2	8

Carline Class Desc	Calc Approach Desc	Sales	Release Date
Small Station Wagons	Vehicle Specific 5-cycle label	(b) (4)	6/12/2009
Small Station Wagons	Vehicle Specific 5-cycle label		6/12/2009
Small Station Wagons	Vehicle Specific 5-cycle label		6/5/2009
Compact Cars	Derived 5-cycle label		6/3/2009
Small Station Wagons	Derived 5-cycle label		6/3/2009
Compact Cars	Derived 5-cycle label		6/3/2009
Compact Cars	Derived 5-cycle label		6/3/2009
Subcompact Cars	Derived 5-cycle label		6/3/2009
Subcompact Cars	Derived 5-cycle label		6/3/2009
Subcompact Cars	Derived 5-cycle label		6/3/2009
Subcompact Cars	Derived 5-cycle label		6/3/2009
Midsize Station Wagons	Vehicle Specific 5-cycle label		6/3/2009
Midsize Cars	Vehicle Specific 5-cycle label		6/3/2009
Midsize Cars	Derived 5-cycle label		5/29/2009
Midsize Cars	Derived 5-cycle label		5/29/2009
Large Cars	Derived 5-cycle label		5/29/2009
Special Purpose Vehicle, SUV 4WD	Vehicle Specific 5-cycle label		6/11/2009
Special Purpose Vehicle, SUV 4WD	Derived 5-cycle label		5/29/2009
Two Seaters	Derived 5-cycle label		6/2/2009
Two Seaters	Derived 5-cycle label		6/2/2009
Two Seaters	Vehicle Specific 5-cycle label		5/25/2009
Two Seaters	Vehicle Specific 5-cycle label		5/25/2009
Compact Cars	Vehicle Specific 5-cycle label		6/3/2009
Compact Cars	Vehicle Specific 5-cycle label		6/3/2009
Subcompact Cars	Vehicle Specific 5-cycle label		5/29/2009
Subcompact Cars	Vehicle Specific 5-cycle label		5/29/2009
Subcompact Cars	Vehicle Specific 5-cycle label		6/3/2009
Midsize Cars	Derived 5-cycle label		6/10/2009
Subcompact Cars	Vehicle Specific 5-cycle label		6/5/2009
Two Seaters	Vehicle Specific 5-cycle label		6/5/2009
Two Seaters	Vehicle Specific 5-cycle label		5/25/2009
Two Seaters	Vehicle Specific 5-cycle label		5/25/2009
Two Seaters	Vehicle Specific 5-cycle label		5/25/2009
Two Seaters	Vehicle Specific 5-cycle label		5/25/2009
Subcompact Cars	Vehicle Specific 5-cycle label		6/18/2009
Compact Cars	Vehicle Specific 5-cycle label		6/18/2009
Compact Cars	Vehicle Specific 5-cycle label		6/18/2009
Compact Cars	Vehicle Specific 5-cycle label		6/18/2009
Compact Cars	Vehicle Specific 5-cycle label		6/12/2009
Special Purpose Vehicle, SUV 2WD	Derived 5-cycle label		6/12/2009
Special Purpose Vehicle, SUV 2WD	Derived 5-cycle label		6/12/2009
Special Purpose Vehicle, SUV 4WD	Derived 5-cycle label		6/12/2009
Midsize Cars	Derived 5-cycle label		6/3/2009
Compact Cars	Derived 5-cycle label		6/3/2009
Subcompact Cars	Derived 5-cycle label		6/3/2009
Two Seaters	Derived 5-cycle label		5/22/2009
Two Seaters	Derived 5-cycle label		5/22/2009
Two Seaters	Derived 5-cycle label		5/22/2009
Two Seaters	Derived 5-cycle label		5/22/2009
Midsize Cars	Vehicle Specific 5-cycle label		6/12/2009
Midsize Station Wagons	Vehicle Specific 5-cycle label		6/12/2009

EPA FE Label Dataset ID	Mfr Contact	Contact Email
1165	RICHARD THOMAS	Richard.Thomas@VW.com
1166	RICHARD THOMAS	Richard.Thomas@VW.com
1097	RICHARD THOMAS	Richard.Thomas@VW.com
942	RICHARD THOMAS	Richard.Thomas@VW.com
947	RICHARD THOMAS	Richard.Thomas@VW.com
955	RICHARD THOMAS	Richard.Thomas@VW.com
948	RICHARD THOMAS	Richard.Thomas@VW.com
943	RICHARD THOMAS	Richard.Thomas@VW.com
952	RICHARD THOMAS	Richard.Thomas@VW.com
958	RICHARD THOMAS	Richard.Thomas@VW.com
949	RICHARD THOMAS	Richard.Thomas@VW.com
1005	RICHARD THOMAS	Richard.Thomas@VW.com
1004	RICHARD THOMAS	Richard.Thomas@VW.com
774	RICHARD THOMAS	Richard.Thomas@VW.com
773	RICHARD THOMAS	Richard.Thomas@VW.com
772	RICHARD THOMAS	Richard.Thomas@VW.com
1164	RICHARD THOMAS	Richard.Thomas@VW.com
803	RICHARD THOMAS	Richard.Thomas@VW.com
984	RICHARD THOMAS	Richard.Thomas@VW.com
983	RICHARD THOMAS	Richard.Thomas@VW.com
1223	RICHARD THOMAS	Richard.Thomas@VW.com
928	RICHARD THOMAS	Richard.Thomas@VW.com
1006	RICHARD THOMAS	Richard.Thomas@VW.com
1008	RICHARD THOMAS	Richard.Thomas@VW.com
780	RICHARD THOMAS	Richard.Thomas@VW.com
775	RICHARD THOMAS	Richard.Thomas@VW.com
1009	RICHARD THOMAS	Richard.Thomas@VW.com
1056	RICHARD THOMAS	Richard.Thomas@VW.com
1112	RICHARD THOMAS	Richard.Thomas@VW.com
1115	RICHARD THOMAS	Richard.Thomas@VW.com
1221	RICHARD THOMAS	Richard.Thomas@VW.com
941	RICHARD THOMAS	Richard.Thomas@VW.com
1222	RICHARD THOMAS	Richard.Thomas@VW.com
938	RICHARD THOMAS	Richard.Thomas@VW.com
1269	RICHARD THOMAS	Richard.Thomas@VW.com
1266	RICHARD THOMAS	Richard.Thomas@VW.com
1267	RICHARD THOMAS	Richard.Thomas@VW.com
1270	RICHARD THOMAS	Richard.Thomas@VW.com
1228	RICHARD THOMAS	Richard.Thomas@VW.com
1199	RICHARD THOMAS	Richard.Thomas@VW.com
1200	RICHARD THOMAS	Richard.Thomas@VW.com
1194	RICHARD THOMAS	Richard.Thomas@VW.com
1048	RICHARD THOMAS	Richard.Thomas@VW.com
1050	RICHARD THOMAS	Richard.Thomas@VW.com
1042	RICHARD THOMAS	Richard.Thomas@VW.com
1219	RICHARD THOMAS	Richard.Thomas@VW.com
895	RICHARD THOMAS	Richard.Thomas@VW.com
1220	RICHARD THOMAS	Richard.Thomas@VW.com
898	RICHARD THOMAS	Richard.Thomas@VW.com
1227	RICHARD THOMAS	Richard.Thomas@VW.com
1226	RICHARD THOMAS	Richard.Thomas@VW.com

[illegible]

To: Jim Snyder/AA/USEPA/US@EPA[]
From: "Hart, Robert (VWoA)"
Sent: Mon 7/6/2009 5:33:18 PM
Subject: FW: MY 2010 Conditional OBD Approval
[AAD-OBD-AADXT03.03LD E-09-148.pdf](#)
<mailto:robert.hart@vw.com>

Hello Jim,

I forgot to Cc: you on this.

Best regards,

Bob Hart

From: Hart, Robert (VWoA)
Sent: Monday, July 06, 2009 8:54 AM
To: 'Peavyhouse.Robert@epamail.epa.gov'
Cc: Thomas, Suanne
Subject: MY 2010 Conditional OBD Approval
Importance: High

Hello Bob,

This is advance notice that I will be submitting an application for test group AADXT03.03LD today with a conditional OBD approval from CARB.

The conditional approval is related to the ARB's OBD Demonstration reporting requirement. Please see the attachment for details.

If you have any questions regarding the attached information, please contact me as indicated below.

Best regards,

Bob Hart

Robert Hart

Emissions & Regulatory Analyst

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4224

Fax: 248 754 4207

<mailto:robert.hart@vw.com>



Linda S. Adams
Secretary for
Environmental Protection

Air Resources Board

Mary D. Nichols, Chairman
9480 Telstar Avenue, Suite 4
El Monte, California 91731 www.arb.ca.gov



Arnold Schwarzenegger
Governor

July 1, 2009

Reference No. E-09-148

Dr. Christoph Kohnen
General Manager
Engineering and Environmental Office
Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326

Post-It® Fax Note	7671	Date	7/1/09	# of pages	5
To	VW	From	ARB		
Co./Dept.		Co.			
Phone #		Phone #			
Fax #	248-754-4207	Fax #	626-575-7012		

SUBJECT: Conditional Approval and Applicable Fines of Volkswagen's (VW) On-Board Diagnostic II (OBD II) System for 2010 Model Year Test Group AADXT03.03LD

Dear Mr. Kohnen:

The Air Resources Board's (ARB) Engineering Studies Branch has received the OBD II system description submitted by VW for the 2010 model year test group listed above. Representations made in the application indicate that the system is compliant with the OBD II regulation with the exception of exhaust gas recirculation (EGR) cooler circulation pump monitoring, EGR cooling thermostat monitoring, fuel quantity and timing monitoring, cold start emission reduction strategy monitoring, emissions increasing-auxiliary emission control device (EI-AECD) tracking, diesel oxidation catalyst (DOC) monitoring, and diesel particulate filter (DPF) monitoring. However, because discrepancies have been found in the OBD II demonstration data representing the test group identified as required by section (h)(1) of the OBD II regulation, ARB can only issue a conditional approval of the system design. The staff has determined that VW meets the factors that allow OBD II systems to be certified with deficiencies. As stated in the email sent by Ms. Suanne Thomas dated July 1, 2009, to Mr. Peter Ho, VW has agreed to pay fines for the third through seventh deficiencies as a condition of certification. Therefore, ARB approves the 2010 model year system with seven deficiencies. While not considered deficient, staff has concerns regarding urea pressure sensor rationality, and selective catalytic reduction (SCR) monitoring. Details of the deficiencies and concerns are noted below. Lastly, upon staff's review and approval of the demonstration data, the conditional status will be removed.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.

California Environmental Protection Agency

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July 1, 2009
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EGR Cooler Circulation Pump Monitor Deficiency

VW's EGR cooling system includes a water pump that is dedicated to the EGR cooling circuit. While the pump is monitored for circuit malfunctions, the OBD II system does not monitor the pump for proper functional response to computer commands as required by the OBD II regulation. As such, the EGR cooler circulation pump monitor is considered deficient.

EGR Thermostat Monitor Deficiency

VW's EGR cooling system includes a thermostat that is dedicated to the EGR cooling circuit. If the thermostat were to stay in a stuck open position, coolant would not be properly regulated through the cooler and could cause fouling and failure of the EGR cooler. VW contends that the EGR cooling efficiency monitor would pick up the fault and turn on the MIL when fouling causes the system to be ineffective. However, this would lead to unnecessary failures of the EGR cooler and would hinder a technician's ability to make effective repairs. The OBD II system does not monitor the thermostat for proper function and is therefore considered deficient.

Fuel Quantity and Timing Monitor Deficiency

For the 2010 model year, VW has introduced a new monitoring strategy to detect fuel quantity and timing malfunctions. There are a number of issues with this monitor and the demonstration testing. First, this strategy required five Unified test cycles to detect a malfunction, which are more cycles than permitted by the OBD regulation. Second, due to an error in the new monitoring strategy the monitor is only able to detect quantity and timing malfunctions that result in reduced quantity. High quantity malfunctions would still rely on the old zero fuel calibration strategy which requires approximately 1000 miles of driving with the malfunction present to detect a failure. Lastly, high quantity demonstration testing was not completed showing fault detection at the required emission levels because of the risk of engine damage. Without further justification, staff does not accept VW's claim that this test cannot be conducted without damaging the engine. For the reasons cited above, this monitor is considered deficient.

Cold Start Emission Reduction Strategy Monitoring Deficiency

VW has indicated that a cold start strategy is used on this vehicle, and each component involved in the cold start phase is individually monitored. In a presentation to ARB, VW showed monitors for the components involved in cold start. However, it was unclear how the components were operated during cold start and whether the OBD system will robustly verify the desired effect is achieved during cold start operation. VW has not

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July 1, 2009
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shown that cold start monitoring requirements are met. Therefore the OBD II system is considered deficient for cold start monitoring.

DOC Monitoring Deficiency

Section (f)(1.2.3)(B) of the regulation requires malfunction detection when the catalyst is unable to generate the necessary feedgas constituents for proper SCR system operation. In previous presentations to ARB, VW has claimed that separate monitoring of feedgas generation is not possible. Instead, VW has claimed this failure mode should be covered by monitoring for non-methane hydrocarbon (NMHC) conversion. However, ARB is not fully convinced that deterioration of feedgas generation and NMHC conversion are directly correlated. Therefore, staff cannot conclude whether the NMHC conversion efficiency monitor will reliably detect a DOC malfunction when the catalyst is unable to generate the feedgas or whether further DOC deterioration will be necessary to fail the NMHC conversion monitor. The OBD II system is therefore deficient for monitoring of the DOC feedgas capability.

DPF Monitoring Deficiency

VW's DPF has a catalyzed coating to help particulate oxidation and extend filter durability. VW has claimed they do not rely on the catalyzed coating for NMHC conversion and monitoring for this function is not possible due to the negligible amount of exothermic reaction in this part. Despite this claim, emission test results with an uncoated DPF show a significant increase in NMHC emissions, though emissions remain below the OBD threshold of three times the emission standard. Section (f)(9.2.4) of the regulation allows for the use of a functional monitor in this case; however, VW's OBD II system does not have this monitor and is considered deficient.

EI-AECD Tracking Deficiency

For 2010 model year diesel vehicles, manufacturers are required to track and report EI-AECD activity as specified in section (g)(6.2) of the regulation. VW has identified EI-AECDs that should be tracked and reported. However, VW has not fully implemented the software to properly track and report the data to a generic scan tool. Consequently, no EI-AECD data will be reported to a scantool. Therefore, the OBD II system is considered deficient for failing to meet EI-AECD tracking requirements. Furthermore, to resolve this deficiency for future model years and so staff can confirm VW's determination on the EI-AECDs that need to be tracked and reported, VW is required to fully document its AECDs and EI-AECDs as required by section (i)(2.15) of the regulation.

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Conditional Approval and Fuel System Demonstration Concern

The OBD II system detects a malfunction for fuel pressure deviation when the difference between commanded and actual fuel pressure reaches a calibrated threshold. When a malfunction is detected, engine torque is reduced to protect the engine and it is not possible to drive the emission test cycle. In order to determine the emission levels when a fault is detected, a malfunction is induced to simulate a worst performing acceptable system (i.e., a barely passing system) via software modification. Specifically, the fuel pressure setpoint was altered in the engine control module (ECM) to simulate engine operation with a malfunction that results in higher or lower than normal pressures. Due to the ability of the fuel system to control to the new setpoint commanded by the ECM, VW claimed there was no resultant deviation measured between the commanded and actual fuel pressures. Staff is concerned that the emission data are not representative of the emission levels from a system that is operating near the malfunction criteria. Therefore staff cannot conclude the emission thresholds are satisfied based on these data. In order to remove the conditional approval VW is required to perform additional tests that result in a deviation near the threshold. Additionally, this chosen method of fault simulation is acceptable for the 2010 model year. However, for future model year approval, VW is required to demonstrate that the computer modifications yield equivalent results to hardware modifications. Further, VW is required to make this demonstration in all cases where computer modifications are used in lieu of hardware modifications.

SCR Time to Closed Loop Concern

Section (f)(2.2.3)(D) of the OBD II regulation requires the OBD II system to detect a malfunction when the SCR system fails to enter closed loop feedback control within a manufacturer's specified time interval. In lieu of monitoring the SCR system for time to enter closed loop, VW is individually monitoring all the components and parameters that are used as inputs to closed loop control. In order to enter closed loop control, VW waits for temperature sensor T6 to exceed 100°C. Monitoring for this temperature occurs after a specific amount of heat has been put into the exhaust system. If the temperature has not been reached after this condition, a malfunction is detected. VW has claimed the monitor is calibrated to a worse case scenario of a drive cycle at continuous idle at -7°C ambient temperature. Staff has concerns this monitor is calibrated too conservatively and may take longer than necessary to detect a malfunction under less than worst case scenarios.

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July 1, 2009
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Urea Pressure Sensor Rationality Monitoring Concern

Staff has concerns that the urea sensor out of range high monitoring threshold was calibrated too high (i.e., 4.86V on a 5V sensor) and will only detect extreme deterioration. In a presentation to ARB, VW showed that frozen urea can cause a rise in measured pressure causing the sensor to read a high voltage value under extreme cold ambient conditions. Staff understands VW is considering a two threshold strategy for future model years to enhance the rationality check and address staff's concerns.

Under the deficiency provisions of section (k) of the OBD II regulation, VW is subject to fines of \$150 per vehicle for each vehicle produced for sale in California from the above test group. Such fines are to be paid to the State Treasurer for deposit in the Air Pollution Control Fund. The total fines that VW will be required to pay will be based on production and distribution records provided by VW for the 2010 model year. VW could limit its total liability should it elect to implement a running change correcting one or more of these deficiencies during the model year. Vehicles produced subsequent to such changes would be subject to lesser fines.

Should you have questions or comments regarding this letter, please have your staff contact Peter Ho at (626) 459-4392.

Sincerely,

 for SGA

Steve Albu, Assistant Chief
Mobile Source Control Division

cc: Peter Ho
Engineering Evaluation Section

To: Robert Peavyhouse/AA/USEPA/US@EPA;Jim Snyder/AA/USEPA/US@EPA[]; im Snyder/AA/USEPA/US@EPA[]
From: "Hart, Robert (VWoA)"
Sent: Wed 7/8/2009 9:15:30 PM
Subject: MY 2010 Conditional OBD Approval for Test Group AVWXV02.0U5N
[AVW-OBD-AVWXV02.0U5N- E-09-150.pdf](#)
<mailto:robert.hart@vw.com>

Hello Bob and Jim,

This is advance notice that I will be submitting an application for test group AVWXV02.0U5N today with a conditional OBD approval from CARB.

The conditional approval is related to the ARB's OBD Demonstration reporting requirement. Please see the attachment for details.

If you have any questions regarding the attached information, please contact me as indicated below.

Best regards,

Bob Hart

Robert Hart

Emissions & Regulatory Analyst

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4224

Fax: 248 754 4207

<mailto:robert.hart@vw.com>



Linda S. Adams
Secretary for
Environmental Protection

Air Resources Board

Mary D. Nichols, Chairman
9480 Telstar Avenue, Suite 4
El Monte, California 91731 www.arb.ca.gov



Arnold Schwarzenegger
Governor

July 3, 2009

Reference No. E-09-150

Dr. Christoph Kohnen
General Manager
Engineering and Environmental Office
Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326

Post-It® Fax Note	7671	Date	7/3/09	# of pages	4
To	VW	From	CARB		
Co./Dept.		Co.			
Phone #		Phone #			
Fax #	248-754-4207	Fax #	626-575-7012		

SUBJECT: Conditional Approval and Applicable Fines for Volkswagen's (VW) On-Board Diagnostics II (OBD II) System Design for 2010 Model Year Test Group AWWXV02.035N

Dear Dr. Kohnen:

The Air Resources Board's (ARB) Engineering Studies Branch has received the OBD II system description submitted by VW for the 2010 model year test group listed above. Representations made in the application indicate that, with the exception of exhaust gas recirculation (EGR) monitoring, fuel quantity and timing monitoring and diesel particulate filter (DPF) monitoring, the system meets the requirements of the OBD II regulation. However, because staff has not completed a review of the submitted OBD II demonstration data representing the test group identified above as required by section (h)(1) of the OBD II regulation, ARB can only issue a conditional approval of the system design. Therefore, ARB conditionally approves the 2010 model year system design for the above test group with three deficiencies. As stated in the email sent by Ms. Suanne Thomas dated July 3, 2009, to Mr. Peter Ho, VW has agreed to pay fines for the third deficiency as a condition of certification. While not considered deficient, staff also has concerns regarding NOx adsorber time to closed loop monitoring, fuel pressure monitoring, and emissions increasing-auxiliary emission control device (EI-AECD) tracking. Details regarding the deficiencies and concerns are discussed below. Upon completion of staff's review and approval of the demonstration data, the conditional status will be removed.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.

California Environmental Protection Agency

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Dr. Kohnen
July 3, 2009
Page 2

DPF Monitoring Deficiency

VW's DPF has a catalyzed coating to help particulate oxidation and extend filter durability. VW has claimed they do not rely on the catalyzed coating for NMHC conversion and monitoring for this function is not possible due to the negligible amount of exothermic reaction in this part. VW has provided emission data from a test with an uncoated diesel oxidation catalyst and DPF, and emissions were below the OBD threshold of three times the emission standard. Section (f)(9.2.4) of the regulation allows for the use of a functional monitor in this case; however, VW's OBD II system does not have this monitor and is considered deficient.

EGR Monitoring Deficiency

Section (f)(6.2.3) requires the OBD II system to detect slow response malfunctions under both increasing and decreasing EGR flow rates. VW monitors for proper EGR valve closing by comparing a modeled air mass flow to actual air mass flow. The monitor is run under fuel cut conditions where EGR is shut off quickly. If the EGR system were slow to respond when the valve is commanded closed, this would have a significant influence on measured airflow and cause a fault to be detected. However the fuel cut diagnostic would not detect slow EGR response in the increasing direction (e.g., when commanding the valve open). In addition to the slow response issues discussed above, staff has concerns regarding EGR low and high flow monitoring, which are required to be monitored continuously. Non-continuous operation may be approved if VW demonstrates that disablement is limited to conditions where a properly operating EGR system cannot be distinguished from a malfunctioning EGR system and the disablement interval is limited only to that which is technically necessary. VW's high and low flow monitors are not monitored continuously. While VW has stated the disablements are necessary for robust detection of EGR malfunctions, VW has not provided data to justify the disablements. Considering these issues regarding EGR monitoring, the OBD II system is deficient for EGR monitoring. To remove this deficiency, VW will be required to monitor and detect slow response in both directions, and submit data to justify disable conditions for the EGR high and low flow monitors.

Fuel Quantity and Timing Monitor Deficiency

For the 2010 model year, VW has introduced a new monitoring strategy to detect fuel quantity and timing malfunctions. This strategy required six Federal Test Procedure cycles to detect a malfunction, which are more cycles than permitted by the OBD regulation. VW has stated it may be possible to detect the malfunction on as few as two Unified cycles due to the increased amount of fuel cut time over the test cycle; however, VW has not yet conducted testing over the Unified cycle. The quantity and timing

Dr. Kohnen
July 3, 2009
Page 3

monitor is therefore considered deficient because it takes too many test cycles to detect the malfunction. The deficiency will be removed if VW demonstrates detection in two Unified cycles.

NOx Adsorber Time to Closed Loop Concern

Section (f)(8.2.3)(A) of the OBD II regulation requires the OBD II system to detect a malfunction when the NOx adsorber system fails to enter feedback control within a manufacturer's specified time interval. In lieu of monitoring the SCR system for time to enter closed loop, VW is individually monitoring all the components and parameters that are used as inputs to closed loop control. In order to enter closed loop control, VW waits for the temperature sensor upstream of the NOx adsorber to exceed 230°C. Monitoring for the temperature sensor occurs after a modeled temperature of 300°C is reached. If the temperature sensor does not read 230°C after the model has reached 300°C, then a malfunction will be detected. VW has provided some data to show that the modeled temperature will exceed 300°C under both city and highway driving conditions. However, based on these limited data, staff cannot fully assess how long after start a properly functioning system reaches 230°C and how long the monitor takes to detect a malfunction. Staff has concerns this monitor may require more time than necessary to detect a malfunction. To avoid a future deficiency determination, VW should explain how the model is calculated, why the model was calibrated to 300°C, and provide data showing the performance of the monitor following an engine start.

Fuel Pressure Monitoring Concern

Fuel pressure monitoring requires a fuel temperature of greater than -20°C to be enabled. The only diagnostic for fuel temperature occurs at cold start sensing a shift from other temperature sensors of $\pm 30^\circ\text{C}$. Staff has concerns that a sensor stuck below -20°C at cold soak temperatures below 10°C could cause fuel system pressure monitoring to be disabled without notification to the driver or a technician. VW has suggested it can lower the fuel pressure enable temperature to -27°C to mitigate staff's concerns. Staff accepts this proposal. However, as diesel diagnostic systems are refined, staff may require additional rationality monitoring (e.g., a monitor that verifies the sensor warms up) of the fuel temperature sensor.

EI-AECD Tracking Concern

For 2010 model year diesel vehicles, manufacturers are required to track and report EI-AECD activity as specified in section (g)(6.2) of the regulation. VW has assessed its AECDs and has not identified any EI-AECDs that should be tracked and reported. Therefore, no EI-AECDs are reported to a generic scan tool. Due to documentation

Dr. Kohnen
July 3, 2009
Page 4

issues, staff has concerns that EI-AECDs which require tracking may exist in VW's system and have not been identified. For example, staff is concerned there may be conditions where NOx adsorber regeneration will not occur (e.g., due to high temperature or load) and vehicle operation under such conditions would require tracking. To resolve this concern and so staff can confirm VW's determination on the EI-AECDs that need to be tracked and reported, VW is required to fully document its AECDs and EI-AECDs as required by section (i)(2.15) of the regulation.

Under the deficiency provisions of section (k) of the OBD II regulation, VW is subject to fines of \$50 per vehicle for each vehicle produced for sale in California from the above test group. Such fines are to be paid to the State Treasurer for deposit in the Air Pollution Control Fund. The total fines that VW will be required to pay will be based on production and distribution records provided by VW for the 2010 model year. VW could limit its total liability should it elect to implement a running change correcting one or more of these deficiencies during the model year. Vehicles produced subsequent to such changes would be subject to lesser fines.

Should you have questions or comments regarding this letter, please have your staff contact Peter Ho at (626) 459-4392.

Sincerely,


Steve Albu, Assistant Chief
Mobile Source Control Division

cc: Peter Ho
Engineering Evaluation Section

To: Jim Snyder/AA/USEPA/US@EPA[]
From: "Hart, Robert (VWoA)"
Sent: Thur 7/9/2009 6:31:44 PM
Subject: VW Group: Two MY 2010 Bentley Test Waiver Requests
<mailto:robert.hart@vw.com>

Hello Jim,

I just uploaded two test waiver requests for Bentley. They are related to a running change calibration to improve fuel economy for the Bentley Continental models in a carryover test group. The first one is an EDV because it is a new "worst case" exhaust emission vehicle configuration for the test group. The second configuration is an FEDV.

Please contact me if you have any questions.

Best regards,

Bob Hart

Robert Hart

Emissions & Regulatory Analyst

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4224

Fax: 248 754 4207

<mailto:robert.hart@vw.com>

To: Jim Snyder/AA/USEPA/US@EPA[]
From: "Hart, Robert (VWoA)"
Sent: Tue 7/21/2009 2:41:06 PM
Subject: MY 2010 Bentley Continental GTC Running Change Letter
<mailto:robert.hart@vw.com>

Hello Jim,

I submitted the attached running change letter through the Verify system.

If you have any questions regarding the attached information, please contact me as indicated below.

Best regards,

Bob Hart

Robert Hart

Emissions & Regulatory Analyst

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4224

Fax: 248 754 4207

<mailto:robert.hart@vw.com>

To: richard.thomas@vw.com;christoph.kohnen@vw.com>[]; hristoph.kohnen@vw.com>[]
Cc: CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]
From: CN=David Good/OU=AA/O=USEPA/C=US
Sent: Mon 7/27/2009 4:44:47 PM
Subject: 2009 & 2010 FE Guide data for web posting - Please review & correct Verify data base if necessary
[Bugatti-ok 2009-2010-FEguide-all rel dates-w-sales1--07-22-09.xls](#)
[Lamborghini-ok 2009-2010-FEguide-all rel dates-w-sales1--07-22-09.xls](#)
[VW-ok 2009-2010-FEguide-all rel dates-w-sales1--07-22-09.xls](#)
[Audi ok 2009-2010-FEguide-all rel dates-w-sales1--07-22-09.xls](#)
[Bentley-ok 2009-2010-FEguide-all rel dates-w-sales1--07-22-09.xls](#)

Richard,

re: 2009 & 2010 FE Guide data for web posting - Please review & correct Verify data base if necessary

As you know we will be updating the www.fueleconomy.gov every week until November 1, 2009 or until the Cash-for-Clunkers program ends. Here's the latest spread sheet. Please double check and correct any errors in Verify. If you need help diagnosing the errors or need to delete any indexes, please call the EPA help line.

Regards

EPA com	VERIFY cc	Model Yr	Mfr Name	Division	Carline	Verify Mfr Index (Mo	Eng Displ	# Cyl
Warning - if trans type is A								
2011	Bugatti	Bugatti	Veyron	BGT	1	8.0	16	

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd Hw	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(S7)	8	14	10				9.5	17.8	12.0228

Gas	Cylinders	Fuel	Comb 5-C	Guzzler?	Air Aspir	Air Aspira	Trans	Trans Des	Trans, Oth	# Gears
8.1	14.1	10.0184	G	TC	Turbochar	SA	Semi-Automatic			7

Trans Loc	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - I	Fuel Usag	Fuel Usag
N	N		44-Wheel DABGT	V08.0V16				GPR	Gasoline (l

Model	Year	Class	Gas Guzzl	Gas Guzzl	2Dr Pass	2Dr Lugg	4Dr Pass	4Dr Lugg	Htchbk Pa	Htchbk Lu
MP	2017	MP	Not exempt							

Annual Fuel	EPA Calc	Comment	City2 FE (Hwy2	Fue Comb2 Fu	Low'd City	Low'd Hw	Low'd Cor	City2 Un
3150	3150							

[illegible]

Alternative Fuel Vehicle	Engine Displacement (L)	Intake Valve	Exhaust Valve	Carline CI	Carline CI	Car/Truck	Calc Appr	Sales
Two Seater	2	2	1	Two Seater		Vehicle Sp		15

Ref Bill	DEPA FE L	Mfr Conta	Contact E	Contact Phone
9/16/2009	1662	RICHARD	Richard.Tr	248 754 4213

EPA comn	VERIFY cc	Model Yr	Mfr Name	Division	Carline	Verify Mfr Index (Mo	Eng Displ	# Cyl
		2010	Lamborghini	Lamborghini	MURCIEL/NLX	2	6.5	12
Warning - if trans type is A	2010	Lamborghini	Lamborghini	MURCIEL/NLX		4	6.5	12
		2010	Lamborghini	Lamborghini	MURCIEL/NLX	3	6.5	12
Warning - if trans type is A	2010	Lamborghini	Lamborghini	MURCIEL/NLX		5	6.5	12

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd Hw	Low'd Coi	City Unad	Hwy Unad	Comb Unad
Manual(M6)	8	13	10				10.1	17.5	12.4735
Auto(AM6)	9	14	11				10.9	19.9	13.6852
Manual(M6)	8	13	10				10.1	17.5	12.4735
Auto(AM6)	9	14	11				10.9	19.9	13.6852

Gas Type	Cylinders	Fuel	Comb	5-C	Guzzler?	Air Aspir	Air Aspira	Trans	Trans Des	Trans, Oth	# Gears
					G	NA	Naturally	AM	Manual		6
					G	NA	Naturally	AM	Automated Manual		6
					G	NA	Naturally	AM	Manual		6
					G	NA	Naturally	AM	Automated Manual		6

Trans Loc	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - I	Fuel Usag	Fuel Usag
N	N	A	All Wheel IANLXV06.5474					GP	Gasoline (l
N	N	A	All Wheel IANLXV06.5474					GP	Gasoline (l
N	N	A	All Wheel IANLXV06.5474					GP	Gasoline (l
N	N	A	All Wheel IANLXV06.5474					GP	Gasoline (l

5Dr Conv'nl Fldbk	Gas Guzzl	Gas Guzzl	2Dr Pass '2	2Dr Lugg	4Dr Pass '4	4Dr Lugg	Htchbk P2	Htchbk Lu
MP0 (leaded, Rec per mnd)								
MP0 (leaded, Rec per mnd)								
MP0 (leaded, Rec per mnd)								
MP0 (leaded, Rec per mnd)								

Annual Fuel	EPA Calc	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel	Low'd City	Low'd Hw	Low'd Cor	City2 Un
3150	3150						
2863	2863	corrected to automated manual trans					
3150	3150						
2863	2863	corrected to automated manual trans					

[illegible]

Alternative Fuel	Engine Displacement	Intake Volume	Exhaust Volume	Carline CI	Carline CI	Car/Truck	Calc Appr	Sales
------------------	---------------------	---------------	----------------	------------	------------	-----------	-----------	-------

		2	2	1	Two Seatecar		Derived 5-	
		2	2	1	Two Seatecar		Derived 5-	
		2	2	1	Two Seatecar		Derived 5-	
		2	2	1	Two Seatecar		Derived 5-	

(b) (4)

Ref ID	DEPA FE L	Mfr Conta	Contact E	Contact Phone
5/22/2009	895	RICHARD	Richard.Tr	248 754 4213
5/22/2009	1219	RICHARD	Richard.Tr	248 754 4213
5/22/2009	898	RICHARD	Richard.Tr	248 754 4213
5/22/2009	1220	RICHARD	Richard.Tr	248 754 4213

EPA com	VERIFY cc	Model Yr	Mfr Name	Division	Carline	Verify Mfr Index (Mo	Eng Displ # Cyl
Warning - if trans type is Au	2010	Volkswage	Audi	Q7	VWX	62	3.6 6
Warning - if trans type is Au	2010	Volkswage	Volkswage	CC	VWX	71	3.6 6
Warning - if trans type is Au	2010	Volkswage	Volkswage	CC 4MOTIV	VWX	72	3.6 6
Warning - if trans type is Au	2010	Volkswage	Volkswage	EOS	VWX	68	2.0 4
Warning - if trans type is Au	2010	Volkswage	Volkswage	GOLF	VWX	28	2.5 5
	2010	Volkswage	Volkswage	GOLF	VWX	31	2.5 5
Warning - if trans type is Au	2010	Volkswage	Volkswage	JETTA	VWX	27	2.5 5
	2010	Volkswage	Volkswage	JETTA	VWX	30	2.5 5
Warning - if trans type is Au	2010	Volkswage	Volkswage	JETTA SP	VWX	26	2.5 5
	2010	Volkswage	Volkswage	JETTA SP	VWX	29	2.5 5
Warning - if trans type is Au	2010	Volkswage	Volkswage	NEW BEE	VWX	65	2.5 5
	2010	Volkswage	Volkswage	NEW BEE	VWX	67	2.5 5
Warning - if trans type is Au	2010	Volkswage	Volkswage	PASSAT	VWX	52	2.0 4
Warning - if trans type is Au	2010	Volkswage	Volkswage	PASSAT V	VWX	54	2.0 4
Warning - if trans type is Au	2010	Volkswage	Volkswage	TOUAREC	VWX	61	3.6 6

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd Hw	Low'd Coi	City Unad	Hwy Unad	Comb Unad
Auto(S6)	14	20	16				17.745	27.3112	21.0653
Auto(S6)	18	27	21				21.2	35.1	25.7972
Auto(S6)	17	25	20				20.5	33.5	24.8373
Auto(S6)	22	29	25				28.0251	41.3156	32.7685
Auto(A6)	23	30	26				27.2668	40.2409	31.8941
Manual(M6)	22	30	25				25.18	39.6147	30.1185
Auto(A6)	23	30	25				27.0008	40.0169	31.6305
Manual(M6)	22	30	25				24.8525	39.5714	29.8486
Auto(A6)	23	30	25				27.0008	40.0169	31.6305
Manual(M6)	22	30	25				24.8525	39.5714	29.8486
Auto(S6)	20	29	23				25.1733	40.8	30.4155
Manual(M6)	20	28	23				24.9892	39.3753	29.9061
Auto(S6)	22	31	25				27.1189	42	32.2629
Auto(S6)	22	31	25				27.1189	42	32.2629
Auto(S6)	14	20	16				17.745	27.3112	21.0653

City	Model	Year	Engine	Trans	Des	Trans, Ot	# Gears
			Comb 5-C	Guzzler?	Air Aspir	Air Aspira	Trans
				NA	Naturally	ASA	Semi-Automatic 6
17.5	26.6	20.6843		NA	Naturally	ASA	Semi-Automatic 6
16.9	25.2	19.8407		NA	Naturally	ASA	Semi-Automatic 6
22.18	29.4583	24.9545		TC	Turbochar	SA	Semi-Automatic 6
22.9556	30.026	25.6764		NA	Naturally	AA	Automatic 6
21.7583	30.3987	24.9495		NA	Naturally	AM	Manual 5
22.69	29.757	25.4051		NA	Naturally	AA	Automatic 6
21.779	30.2556	24.9209		NA	Naturally	AM	Manual 5
22.69	29.757	25.4051		NA	Naturally	AA	Automatic 6
21.779	30.2556	24.9209		NA	Naturally	AM	Manual 5
				NA	Naturally	ASA	Semi-Automatic 6
				NA	Naturally	AM	Manual 5
21.9904	30.747	25.2229		TC	Turbochar	SA	Semi-Automatic 6
21.9904	30.747	25.2229		TC	Turbochar	SA	Semi-Automatic 6
				NA	Naturally	ASA	Semi-Automatic 6

Trans Loc	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - I	Fuel Usag	Fuel Usag
N	N	A	All Wheel IAVWXT03.6U76					GP	Gasoline (l
N	N	F	2-Wheel DAVWXV03.6U46					GP	Gasoline (l
N	N	A	All Wheel IAVWXV03.6U46					GP	Gasoline (l
N	N	F	2-Wheel DAVWXV02.03UA					GP	Gasoline (l
N	N	F	2-Wheel DAVWXV02.5U35					G	Gasoline (l
N	N	F	2-Wheel DAVWXV02.5U35					G	Gasoline (l
N	N	F	2-Wheel DAVWXV02.5U35					G	Gasoline (l
N	N	F	2-Wheel DAVWXV02.5U35					G	Gasoline (l
N	N	F	2-Wheel DAVWXV02.5U35					G	Gasoline (l
N	N	F	2-Wheel DAVWXV02.5U35					G	Gasoline (l
N	N	F	2-Wheel DAVWXV02.5253					G	Gasoline (l
N	N	F	2-Wheel DAVWXV02.5253					G	Gasoline (l
N	N	F	2-Wheel DAVWXV02.03UA					GP	Gasoline (l
N	N	F	2-Wheel DAVWXV02.03UA					GP	Gasoline (l
N	N	A	All Wheel IAVWXT03.6U76					GP	Gasoline (l

5000	Directional	Off-Highway	Gas Guzzl	Gas Guzzl	2Dr Pass	2Dr Lugg	4Dr Pass	4Dr Lugg	Htchbk P2	Htchbk Lu
MP	leaded	Recopen	ended)	Truck						
MP	leaded	Recopen	ended)	Not exempt			94	13		
MP	leaded	Recopen	ended)	Not exempt			94	13		
MP	leaded	Recopen	ended)	Not exemp	77	11				
MP	leaded	Recopen	ended)	Not exempt					94	15
MP	leaded	Recopen	ended)	Not exempt					94	15
MP	leaded	Recopen	ended)	Not exempt			91	16		
MP	leaded	Recopen	ended)	Not exempt			91	16		
MP	leaded	Recopen	ended)	Not exempt			92	33		
MP	leaded	Recopen	ended)	Not exempt			92	33		
MP	leaded	Recopen	ended)	Not exempt					85	12
MP	leaded	Recopen	ended)	Not exempt					85	12
MP	leaded	Recopen	ended)	Not exempt			96	14		
MP	leaded	Recopen	ended)	Not exempt			97	36		
MP	leaded	Recopen	ended)	Truck						

Annual Fuel Economy (EPA Calc)	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Low'd City Low'd Hwy Low'd CorCity2 Unadjusted)
1969	1969	
1499	1499	
1575	1575	
1260	1260this is a double clutch transmission and it has no torque converter with a lock-up	
1097	1097CORRECTED MODEL TYPE FE AND ANNUAL FUEL COST FOR THIS GOLF	
1140	1140	
1140	1140	
1140	1140	
1140	1140	
1140	1140	
1240	1240	
1240	1240	
1260	1260CORRECTED DATA SUB TO NO SUB FOR ALL TESTS	
1260	1260	
1969	1969	

[illegible]

Alternative Fuel	Engine Displacement	Intake Val	Exhaust Val	Carline CI	Carline CI	Car/Truck	Calc Appr	Sales
------------------	---------------------	------------	-------------	------------	------------	-----------	-----------	-------

2	2	23	Special Pu	1	Derived 5-i			
2	2	4	Compact Ccar		Vehicle Sp			
2	2	4	Compact Ccar		Vehicle Sp			
2	2	3	Subcompacar		Vehicle Sp			
2	2	4	Compact Ccar		Vehicle Sp			
2	2	4	Compact Ccar		Vehicle Sp			
2	2	4	Compact Ccar		Vehicle Sp			
2	2	4	Compact Ccar		Vehicle Sp			
2	2	7	Small Staticar		Vehicle Sp			
2	2	7	Small Staticar		Vehicle Sp			
2	2	3	Subcompacar		Derived 5-i			
2	2	3	Subcompacar		Derived 5-i			
2	2	5	Midsize Ccar		Vehicle Sp			
2	2	8	Midsize Stcar		Vehicle Sp			
2	2	23	Special Pu	1	Derived 5-i			

Release DEPA FE L:Mfr Conta Contact E Contact Phone

7/22/2009	1616	RICHARD	Richard.Tr	248 754 4213
7/22/2009	1681	RICHARD	Richard.Tr	248 754 4213
7/22/2009	1682	RICHARD	Richard.Tr	248 754 4213
7/22/2009	1675	RICHARD	Richard.Tr	248 754 4213
7/18/2009	1507	RICHARD	Richard.Tr	248 754 4213
7/18/2009	1542	RICHARD	Richard.Tr	248 754 4213
7/18/2009	1500	RICHARD	Richard.Tr	248 754 4213
7/18/2009	1541	RICHARD	Richard.Tr	248 754 4213
7/18/2009	1498	RICHARD	Richard.Tr	248 754 4213
7/18/2009	1540	RICHARD	Richard.Tr	248 754 4213
7/22/2009	1646	RICHARD	Richard.Tr	248 754 4213
7/22/2009	1647	RICHARD	Richard.Tr	248 754 4213
7/12/2009	1227	RICHARD	Richard.Tr	248 754 4213
7/12/2009	1226	RICHARD	Richard.Tr	248 754 4213
7/22/2009	1615	RICHARD	Richard.Tr	248 754 4213

EPA comn	VERIFY cc	Model Yr	Mfr Name	Division	Carline	Verify Mfr Index (Mo	Eng Displ #	Cyl
		2010	Audi	Audi	A3	ADX	46	2.0 4
Warning - if trans type is A	2010	Audi	Audi	A3	ADX	47	2.0 4	
Warning - if trans type is A	2010	Audi	Audi	A3 QUATT	ADX	43	2.0 4	
	2010	Audi	Audi	A4	ADX	18	2.0 4	
	2010	Audi	Audi	A4 AVANT	ADX	20	2.0 4	
	2010	Audi	Audi	A4 QUATT	ADX	21	2.0 4	
	2010	Audi	Audi	A4 QUATT	ADX	24	2.0 4	
	2010	Audi	Audi	A5 Cabriol	ADX	19	2.0 4	
	2010	Audi	Audi	A5 Cabriol	ADX	23	2.0 4	
	2010	Audi	Audi	A5 QUATT	ADX	22	2.0 4	
	2010	Audi	Audi	A5 QUATT	ADX	25	2.0 4	
Warning - if trans type is A	2010	Audi	Audi	A5 QUATT	ADX	60	3.2 6	
	2009	Audi	Audi	A6 AVANT	ADX	43	3.0 6	
	2010	Audi	Audi	A6 AVANT	ADX	35	3.0 6	
	2009	Audi	Audi	A6 QUATT	ADX	42	3.0 6	
	2010	Audi	Audi	A6 QUATT	ADX	8	4.2 8	
	2010	Audi	Audi	A6 QUATT	ADX	34	3.0 6	
	2010	Audi	Audi	A8	ADX	7	4.2 8	
	2010	Audi	Audi	A8 L	ADX	6	4.2 8	
	2009	Audi	Audi	Q5	ADX	44	3.2 6	
Warning - if trans type is A	2010	Audi	Audi	Q5	ADX	48	3.2 6	
Diesel;	2009	Audi	Audi	Q7	ADX	46	3.0 6	
	2010	Audi	Audi	Q7	ADX	11	4.2 8	
Diesel; Warning - if trans type is A	2010	Audi	Audi	Q7	ADX	63	3.0 6	
Warning - if trans type is A	2010	Audi	Audi	R8	ADX	16	5.2 10	
	2010	Audi	Audi	R8	ADX	17	5.2 10	
	2010	Audi	Audi	R8	ADX	32	4.2 8	
	2010	Audi	Audi	R8	ADX	33	4.2 8	
	2010	Audi	Audi	S4	ADX	36	3.0 6	
Warning - if trans type is A	2010	Audi	Audi	S4	ADX	37	3.0 6	
	2010	Audi	Audi	S5	ADX	9	4.2 8	
	2010	Audi	Audi	S5	ADX	10	4.2 8	
Warning - if trans type is A	2010	Audi	Audi	S5 Cabriol	ADX	38	3.0 6	
Warning - if trans type is A	2010	Audi	Audi	S6	ADX	42	5.2 10	
Warning - if trans type is A	2010	Audi	Audi	TT COUPE	ADX	44	2.0 4	
Warning - if trans type is A	2010	Audi	Audi	TT ROAD	ADX	45	2.0 4	
	2010	Audi	Lamborghini	Gallardo	CADX	12	5.2 10	
	2010	Audi	Lamborghini	Gallardo	CADX	14	5.2 10	
Warning - if trans type is A	2010	Audi	Lamborghini	Gallardo	SADX	13	5.2 10	
	2010	Audi	Lamborghini	Gallardo	SADX	15	5.2 10	
	2010	Audi	Volkswage	EOS	ADX	57	2.0 4	
	2010	Audi	Volkswage	GTI	ADX	56	2.0 4	
Warning - if trans type is A	2010	Audi	Volkswage	GTI	ADX	70	2.0 4	
	2010	Audi	Volkswage	JETTA	ADX	55	2.0 4	
Warning - if trans type is A	2010	Audi	Volkswage	JETTA	ADX	69	2.0 4	
Warning - if trans type is A	2010	Audi	Volkswage	PASSAT	CADX	53	2.0 4	
	2010	Audi	Volkswage	PASSAT	CADX	58	2.0 4	
Warning - if trans type is A	2010	Audi	Volkswage	TIGUAN	ADX	50	2.0 4	
	2010	Audi	Volkswage	TIGUAN	ADX	51	2.0 4	
Warning - if trans type is A	2010	Audi	Volkswage	TIGUAN 4	ADX	49	2.0 4	
Diesel;	2009	Audi	Volkswage	TOUAREG	ADX	47	3.0 6	
Diesel; Warning - if trans type is A	2010	Audi	Volkswage	Touareg	ADX	64	3.0 6	

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd Hw	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Manual(M€	21	30	24				25.2906	40.4003	30.4083
Auto(S6)	22	28	24				27.0473	38.8702	31.3364
Auto(S6)	21	28	24				27.2	37.1	30.9119
Auto(AV)	23	30	26				29.2373	42.7743	34.0926
Auto(S6)	21	27	23				25.9563	37.7989	30.2164
Auto(S6)	21	27	23				25.9563	37.7989	30.2164
Manual(M€	22	30	25				27.6402	42.575	32.8212
Auto(AV)	23	30	26				29.2373	42.7743	34.0926
Auto(S6)	20	26	23				25.9	37	29.9422
Auto(S6)	21	27	23				25.9563	37.7989	30.2164
Manual(M€	22	30	25				27.6402	42.575	32.8212
Auto(S6)	18	27	21				22.6	36.2	27.1981
Auto(S6)	18	26	21				21.8	34.8	26.2052
Auto(S6)	18	26	21				21.7553	34.7286	26.1514
Auto(S6)	18	26	21				21.8	34.8	26.2052
Auto(S6)	16	23	18				19.8911	31.5002	23.8458
Auto(S6)	18	26	21				21.7553	34.7286	26.1514
Auto(S6)	16	23	18				19.8911	31.5002	23.8458
Auto(S6)	16	23	18				19.8911	31.5002	23.8458
Auto(S6)	18	23	20				22.7	30.7	25.7155
Auto(S6)	18	23	20				22.7	30.7	25.7155
Auto(S6)	17	25	20				19.8	33.2	24.1943
Auto(S6)	13	18	15				16.2	24.6	19.1412
Auto(S6)	17	25	20				19.8	33.2	24.1943
Auto(AM6)	13	20	16				15.8	24.8	18.8839
Manual(M€	12	20	15				13.7	23.9	16.9565
Auto(S6)	13	18	15				15.4	25.0451	18.6283
Manual(M€	12	19	15				15.3	26.8	18.9614
Manual(M€	18	27	21				21.5	34.1	25.7879
Auto(S7)	18	28	21				21.6	35	26.096
Auto(S6)	16	24	19				20.4	31	24.1098
Manual(M€	14	22	17				17.3	29.3	21.2088
Auto(S7)	17	26	20				20.3	34	24.7961
Auto(S6)	14	19	16				17.2	26.7	20.4789
Auto(S6)	21	29	24				27.5267	39.7256	31.9404
Auto(S6)	21	29	24				27.5267	39.7256	31.9404
Auto(AM6)	14	20	16				16.1	25.4	19.276
Manual(M€	12	20	15				14	24	17.2308
Auto(AM6)	13	20	16				16	25.4	19.197
Manual(M€	12	20	14				13	22.6	16.0722
Manual(M€	21	31	25				26.0803	41.521	31.3218
Manual(M€	21	31	25				26.0803	41.521	31.3218
Auto(S6)	24	32	27				29.8294	43.5414	34.7546
Manual(M€	21	31	25				26.0803	41.521	31.3218
Auto(S6)	24	32	27				29.8294	43.5414	34.7546
Auto(S6)	22	31	25				27.1189	42	32.2629
Manual(M€	21	31	25				26.0803	41.521	31.3218
Auto(S6)	18	24	21				22.9	34.1	26.8716
Manual(M€	19	26	21				23.3	36.2	27.75
Auto(S6)	18	24	20				22.5	33.3	26.3449
Auto(S6)	17	25	20				21.9	34.4	26.1811
Auto(S6)	18	25	20				21.9	34.4	26.1811

Gas Mileage	City	Highway	Fuel Economy	Comb 5-Cyl	Guzzler?	Air Aspir	I Air	Aspira	Trans	Trans Des	Trans, Ott	# Gears
20.79	60.6	30	24.123			TC	Turbochar	M		Manual		6
21.56	29	27.723	23.9585			TC	Turbochar	SA		Semi-Automatic		6
20.9		28.1	23.6239			TC	Turbochar	SA		Semi-Automatic		6
						TC	Turbochar	CVT		Continuously Variable		1
						TC	Turbochar	SA		Semi-Automatic		6
						TC	Turbochar	SA		Semi-Automatic		6
						TC	Turbochar	M		Manual		6
						TC	Turbochar	CVT		Continuously Variable		1
						TC	Turbochar	SA		Semi-Automatic		6
						TC	Turbochar	SA		Semi-Automatic		6
						TC	Turbochar	M		Manual		6
18.2		27.2	21.384			NA	Naturally	ASA		Semi-Automatic		6
17.6		25.9	20.5658			SC	Superchar	SA		Semi-Automatic		6
17.6		25.9	20.6407			SC	Superchar	SA		Semi-Automatic		6
17.6		25.9	20.5658			SC	Superchar	SA		Semi-Automatic		6
						NA	Naturally	ASA		Semi-Automatic		6
17.6		25.9	20.6407			SC	Superchar	SA		Semi-Automatic		6
						NA	Naturally	ASA		Semi-Automatic		6
						NA	Naturally	ASA		Semi-Automatic		6
17.8		22.9	19.7826			NA	Naturally	ASA		Semi-Automatic		6
17.8		22.9	19.7826			NA	Naturally	ASA		Semi-Automatic		6
16.6		24.8	19.5017			TC	Turbochar	SA		Semi-Automatic		6
						NA	Naturally	ASA		Semi-Automatic		6
16.6		24.8	19.5017			TC	Turbochar	SA		Semi-Automatic		6
13.3		19.5	15.5206	G		NA	Naturally	AAM		Automated Manual		6
11.9		19.9	14.5282	G		NA	Naturally	AM		Manual		6
				G		NA	Naturally	ASA		Semi-Automatic		6
				G		NA	Naturally	AM		Manual		6
17.8		26.7	20.9412			SC	Superchar	M		Manual		6
17.7		27.8	21.1593			SC	Superchar	SA		Semi-Automatic		7
16.5		24.2	19.2573			NA	Naturally	ASA		Semi-Automatic		6
14.3		21.9	16.9464	G		NA	Naturally	AM		Manual		6
16.7		26.1	19.93			SC	Superchar	SA		Semi-Automatic		7
				G		NA	Naturally	ASA		Semi-Automatic		6
21.2766		29.052	24.1899			TC	Turbochar	SA		Semi-Automatic		6
21.2766		29.052	24.1899			TC	Turbochar	SA		Semi-Automatic		6
13.5		19.8	15.756	G		NA	Naturally	AAM		Automated Manual		6
12.1		20	14.7157	G		NA	Naturally	AM		Manual		6
13.4		19.8	15.6809	G		NA	Naturally	AAM		Automated Manual		6
11.5		19.5	14.1038	G		NA	Naturally	AM		Manual		6
21.101		30.8701	24.6049			TC	Turbochar	M		Manual		6
21.101		30.8701	24.6049			TC	Turbochar	M		Manual		6
24.0933		32.4086	27.2382			TC	Turbochar	SA		Semi-Automatic		6
21.101		30.8701	24.6049			TC	Turbochar	M		Manual		6
24.0933		32.4086	27.2382			TC	Turbochar	SA		Semi-Automatic		6
21.9904		30.747	25.2229			TC	Turbochar	SA		Semi-Automatic		6
21.101		30.8701	24.6049			TC	Turbochar	M		Manual		6
						TC	Turbochar	SA		Semi-Automatic		6
						TC	Turbochar	M		Manual		6
						TC	Turbochar	SA		Semi-Automatic		6
						TC	Turbochar	SA		Semi-Automatic		6
17.8		24.6	20.3287			TC	Turbochar	SA		Semi-Automatic		6

Trans Loc	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - I	Fuel Usag	Fuel Usag
N	N	F	2-Wheel DAADXV02.03UA					GP	Gasoline (I
N	N	F	2-Wheel DAADXV02.03UA					GP	Gasoline (I
N	N	A	All Wheel IAADXV02.03UA					GP	Gasoline (I
N	N	F	2-Wheel DAADXV02.03UB					GP	Gasoline (I
Y	N	A	All Wheel IAADXV02.03UB					GP	Gasoline (I
Y	N	A	All Wheel IAADXV02.03UB					GP	Gasoline (I
Y	N	A	All Wheel IAADXV02.03UB					GP	Gasoline (I
N	N	F	2-Wheel DAADXV02.03UB					GP	Gasoline (I
Y	N	A	All Wheel IAADXV02.03UB					GP	Gasoline (I
Y	N	A	All Wheel IAADXV02.03UB					GP	Gasoline (I
Y	N	A	All Wheel IAADXV02.03UB					GP	Gasoline (I
N	N	A	All Wheel IAADXJ03.23UC					GP	Gasoline (I
Y	N	A	All Wheel I9ADXV03.03UF					GP	Gasoline (I
Y	N	A	All Wheel IAADXV03.03UF					GP	Gasoline (I
Y	N	A	All Wheel I9ADXV03.03UF					GP	Gasoline (I
Y	N	A	All Wheel IAADXV04.2365					GP	Gasoline (I
Y	N	A	All Wheel IAADXV03.03UF					GP	Gasoline (I
Y	N	A	All Wheel IAADXV04.2365					GP	Gasoline (I
Y	N	A	All Wheel IAADXV04.2365					GP	Gasoline (I
Y	N	A	All Wheel I9ADXT03.23UC					GP	Gasoline (I
N	N	A	All Wheel IAADXJ03.23UC					GP	Gasoline (I
Y	N	A	All Wheel I9ADXT03.03LD			5	D		Diesel, low
Y	N	A	All Wheel IAADXT04.23UD					GP	Gasoline (I
N	N	A	All Wheel IAADXT03.03LD			5	DU		Diesel, ultr
N	N	A	All Wheel IAADXV05.2LR8					GP	Gasoline (I
N	N	A	All Wheel IAADXV05.2LR8					GP	Gasoline (I
Y	N	A	All Wheel IAADXV04.2375					GP	Gasoline (I
Y	N	A	All Wheel IAADXV04.2375					GP	Gasoline (I
N	N	A	All Wheel IAADXV03.03UF					GP	Gasoline (I
N	N	A	All Wheel IAADXV03.03UF					GP	Gasoline (I
Y	N	A	All Wheel IAADXV04.2365					GP	Gasoline (I
N	N	A	All Wheel IAADXV04.2365					GP	Gasoline (I
N	N	A	All Wheel IAADXV03.03UF					GP	Gasoline (I
N	N	A	All Wheel IAADXV05.2385					GP	Gasoline (I
N	N	A	All Wheel IAADXV02.03UA					GP	Gasoline (I
N	N	A	All Wheel IAADXV02.03UA					GP	Gasoline (I
Y	N	A	All Wheel IAADXV05.2LR8					GP	Gasoline (I
N	N	A	All Wheel IAADXV05.2LR8					GP	Gasoline (I
N	N	A	All Wheel IAADXV05.2LR8					GP	Gasoline (I
N	N	A	All Wheel IAADXV05.2LR8					GP	Gasoline (I
N	N	F	2-Wheel DAVWXV02.03UA					GP	Gasoline (I
N	N	F	2-Wheel DAADXV02.03UA					GP	Gasoline (I
N	N	F	2-Wheel DAADXV02.03UA					GP	Gasoline (I
N	N	F	2-Wheel DAADXV02.03UA					GP	Gasoline (I
N	N	F	2-Wheel DAADXV02.03UA					GP	Gasoline (I
N	N	F	2-Wheel DAADXV02.03UA					GP	Gasoline (I
N	N	F	2-Wheel DAADXV02.03UA					GP	Gasoline (I
N	N	F	2-Wheel DAADXV02.03UA					GP	Gasoline (I
N	N	F	2-Wheel DAADXV02.03UA					GP	Gasoline (I
N	N	A	All Wheel IAADXV02.03UA					GP	Gasoline (I
Y	N	A	All Wheel I9ADXT03.03LD			5	D		Diesel, low
N	N	A	All Wheel IAADXT03.03LD			5	DU		Diesel, ultr

[illegible]

Annual Fuel	EPA Calculated	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Low'd City Low'd Hw Low'd City2 Unadjusted
1314	1314		
1314	1314		
1314	1314	corrected number of forward gears to 6	
1213	1213		
1370	1370		
1370	1370		
1260	1260		
1213	1213		
1370	1370		
1370	1370		
1260	1260		
1499	1499		
1499	1499	corrected annual fuel cost to reflect new unit price issued by EPA in March 2009	
1499	1499		
1499	1499	corrected annual fuel cost to reflect new unit price issued by EPA in March	
1751	1751		
1499	1499		
1751	1751		
1751	1751		
1575	1575	correction to annual fuel cost from new unit price issued by EPA March 2009, and gas guzzler	
1575	1575	Corrected number of forward gears to 6 from 1	
1688	1688	corrected gas guzzler exempt statement to Truck and corrected fuel to Diesel and the annual	
2101	2101		
1688	1688		
1969	1969	SC03 and Cold CO tests are from Audi R8 configuration 0 of veh 9LR8-RAQ used in Lamborghini	
2101	2101	SC03 and Cold CO tests are from Audi R8 configuration 0 of veh 9LR8-RMQ used in Lamborghini	
2101	2101		
2101	2101		
1499	1499		
1499	1499	Corrected trans code to S7	
1657	1657		
1852	1852		
1575	1575		
1969	1969		
1314	1314	corrected number of forward gears to 6	
1314	1314	corrected the number of forward gears to 6	
1969	1969	SC03 and Cold CO tests are originally from worse case Audi R8 configuration 0 of veh 9LR8	
2101	2101	SC03 and Cold CO tests are from Audi R8 worse case configuration 0 of veh 9LR8-RMQ.	
1969	1969	SC03 and Cold CO tests are from Audi R8 worse case configuration 0 of veh 9LR8-RAQ. corrected	
2249	2249	SC03 and Cold CO tests are from Audi R8 worse case configuration 0 of veh 9LR8-RMQ. Corrected	
1260	1260	added manuf confirmatory tests for Eos 2.0SA test group	
1260	1260	added manuf confirmatory tests for SULEV Eos	
1166	1166	this is a double clutch transmission and it has no hydrolic torque converter with a lock-up	
1260	1260	corrected manuf code, the manuf confirmatory tests for the Eos in the2.03SA test group with	
1166	1166	this is a double clutch transmission and it has no hydrolic torque converter with a lock-up	
1260	1260	CORRECTED SALES VOLUME FOR THIS CC MODEL, SECOND CORRECTION TO LIST T	
1260	1260	manuf confirmatory tests added for Eos ...2.0SA test group	
1499	1499	corrected to use derived 5-cycle label method	
1499	1499	corrected to use derived 5-cycle method for label	
1575	1575	changed to derived 5 cycle label calculation	
1688	1688	corrected annual fuel cost and gas guzzler exempt category, then added this statement	
1688	1688		

MSRP, Fuel Type, Fuel Economy, Fuel Combustion, Fuel Range, Fuel Usage, Fuel Unit, Fuel Unit

exempt to truck, plus US06 and SC03 test numbers corrected

I fule cost based upon new unit price issued by EPA in March 2009

ghini 5 cycle labels. Transmission lock-up corrected to "no". corrected to automated manual trans
ghini 5 cycle labels.

-RAQ. corrected to automated manual trans

rected ETW and IW to 4000lbs corrected to automated manual trans
rected annual fuel cost

ere added

HE CC CARLINE CODE AS 293 NOT 291 AT DATA LEVEL

Model	Year	Fuel	EPA	Engine	Displacement	Intake Val	Exhaust Val	Carline	CI	Carline	CI	Car/Truck	Calc	Appr	Sales
	2		2		7	Small	Staticar	Vehicle	Sp						(b) (4)
	2		2		7	Small	Staticar	Vehicle	Sp						
	2		2		7	Small	Staticar	Vehicle	Sp						
	2		2		4	Compact	Ccar	Derived	5-						
	2		2		7	Small	Staticar	Derived	5-						
	2		2		4	Compact	Ccar	Derived	5-						
	2		2		4	Compact	Ccar	Derived	5-						
	2		2		3	Subcompact	acar	Derived	5-						
	2		2		3	Subcompact	acar	Derived	5-						
	2		2		3	Subcompact	acar	Derived	5-						
	2		2		3	Subcompact	acar	Derived	5-						
	2		2		3	Subcompact	acar	Vehicle	Sp						
	2		2		8	Midsize	Stcar	Vehicle	Sp						
	2		2		8	Midsize	Stcar	Vehicle	Sp						
	2		2		5	Midsize	Ccar	Vehicle	Sp						
	2		2		5	Midsize	Ccar	Derived	5-						
	2		2		5	Midsize	Ccar	Vehicle	Sp						
	2		2		5	Midsize	Ccar	Derived	5-						
	2		2		6	Large	Carscar	Derived	5-						
	2		2		23	Special	Pu	1	Vehicle	Sp					
	2		2		23	Special	Pu	1	Vehicle	Sp					
	2		2		23	Special	Pu	1	Vehicle	Sp					
	2		2		23	Special	Pu	1	Derived	5-					
	2		2		23	Special	Pu	1	Vehicle	Sp					
	2		2		1	Two	Seatecar	Vehicle	Sp						
	2		2		1	Two	Seatecar	Vehicle	Sp						
	2		2		1	Two	Seatecar	Derived	5-						
	2		2		1	Two	Seatecar	Derived	5-						
	2		2		4	Compact	Ccar	Vehicle	Sp						
	2		2		4	Compact	Ccar	Vehicle	Sp						
	2		2		3	Subcompact	acar	Vehicle	Sp						
	2		2		3	Subcompact	acar	Vehicle	Sp						
	2		2		3	Subcompact	acar	Vehicle	Sp						
	2		2		5	Midsize	Ccar	Derived	5-						
	2		2		3	Subcompact	acar	Vehicle	Sp						
	2		2		1	Two	Seatecar	Vehicle	Sp						
	2		2		1	Two	Seatecar	Vehicle	Sp						
	2		2		1	Two	Seatecar	Vehicle	Sp						
	2		2		1	Two	Seatecar	Vehicle	Sp						
	2		2		1	Two	Seatecar	Vehicle	Sp						
	2		2		1	Two	Seatecar	Vehicle	Sp						
	2		2		3	Subcompact	acar	Vehicle	Sp						
	2		2		4	Compact	Ccar	Vehicle	Sp						
	2		2		4	Compact	Ccar	Vehicle	Sp						
	2		2		4	Compact	Ccar	Vehicle	Sp						
	2		2		4	Compact	Ccar	Vehicle	Sp						
	2		2		4	Compact	Ccar	Vehicle	Sp						
	2		2		4	Compact	Ccar	Vehicle	Sp						
	2		2		22	Special	Pu	1	Derived	5-					
	2		2		22	Special	Pu	1	Derived	5-					
	2		2		23	Special	Pu	1	Derived	5-					
	2		2		23	Special	Pu	1	Derived	5-					
	2		2		23	Special	Pu	1	Vehicle	Sp					

Release DEPA FE L:Mfr Conta Contact E Contact Phone

6/12/2009	1165	RICHARD	Richard.Tr	248 754 4213
6/12/2009	1166	RICHARD	Richard.Tr	248 754 4213
6/5/2009	1447	RICHARD	Richard.Tr	248 754 4213
6/3/2009	942	RICHARD	Richard.Tr	248 754 4213
6/3/2009	947	RICHARD	Richard.Tr	248 754 4213
6/3/2009	948	RICHARD	Richard.Tr	248 754 4213
6/3/2009	955	RICHARD	Richard.Tr	248 754 4213
6/3/2009	943	RICHARD	Richard.Tr	248 754 4213
6/3/2009	952	RICHARD	Richard.Tr	248 754 4213
6/3/2009	949	RICHARD	Richard.Tr	248 754 4213
6/3/2009	958	RICHARD	Richard.Tr	248 754 4213
6/22/2009	1553	RICHARD	Richard.Tr	248 754 4213
6/19/2009	830	RICHARD	Richard.Tr	248 754 4213
6/3/2009	1005	RICHARD	Richard.Tr	248 754 4213
6/19/2009	828	RICHARD	Richard.Tr	248 754 4213
5/29/2009	774	RICHARD	Richard.Tr	248 754 4213
6/3/2009	1004	RICHARD	Richard.Tr	248 754 4213
5/29/2009	773	RICHARD	Richard.Tr	248 754 4213
5/29/2009	772	RICHARD	Richard.Tr	248 754 4213
6/19/2009	835	RICHARD	Richard.Tr	248 754 4213
6/11/2009	1630	RICHARD	Richard.Tr	248 754 4213
6/19/2009	831	RICHARD	Richard.Tr	248 754 4213
5/29/2009	803	RICHARD	Richard.Tr	248 754 4213
6/22/2009	1639	RICHARD	Richard.Tr	248 754 4213
6/25/2009	1223	RICHARD	Richard.Tr	248 754 4213
6/25/2009	928	RICHARD	Richard.Tr	248 754 4213
6/2/2009	983	RICHARD	Richard.Tr	248 754 4213
6/2/2009	984	RICHARD	Richard.Tr	248 754 4213
6/3/2009	1006	RICHARD	Richard.Tr	248 754 4213
6/3/2009	1008	RICHARD	Richard.Tr	248 754 4213
6/29/2009	775	RICHARD	Richard.Tr	248 754 4213
6/29/2009	780	RICHARD	Richard.Tr	248 754 4213
6/3/2009	1009	RICHARD	Richard.Tr	248 754 4213
6/10/2009	1056	RICHARD	Richard.Tr	248 754 4213
6/5/2009	1448	RICHARD	Richard.Tr	248 754 4213
6/5/2009	1449	RICHARD	Richard.Tr	248 754 4213
6/25/2009	1221	RICHARD	Richard.Tr	248 754 4213
6/25/2009	941	RICHARD	Richard.Tr	248 754 4213
6/25/2009	1222	RICHARD	Richard.Tr	248 754 4213
6/25/2009	1450	RICHARD	Richard.Tr	248 754 4213
6/18/2009	1382	RICHARD	Richard.Tr	248 754 4213
6/18/2009	1381	RICHARD	Richard.Tr	248 754 4213
6/22/2009	1678	RICHARD	Richard.Tr	248 754 4213
6/18/2009	1379	RICHARD	Richard.Tr	248 754 4213
6/22/2009	1677	RICHARD	Richard.Tr	248 754 4213
6/12/2009	1640	RICHARD	Richard.Tr	248 754 4213
6/18/2009	1383	RICHARD	Richard.Tr	248 754 4213
6/12/2009	1200	RICHARD	Richard.Tr	248 754 4213
6/12/2009	1199	RICHARD	Richard.Tr	248 754 4213
6/12/2009	1194	RICHARD	Richard.Tr	248 754 4213
5/19/2009	832	RICHARD	Richard.Tr	248 754 4213
6/22/2009	1642	RICHARD	Richard.Tr	248 754 4213

EPA.com	VERIFY	cc	Model Yr	Mfr Name	Division	Carline	Verify Mfr Index	(Mo Eng Displ # Cyl
			2010	Bentley	Bentley Mc	Continental	BEX	40 6.0 12
			2010	Bentley	Bentley Mc	Continental	BEX	41 6.0 12
			2010	Bentley	Bentley Mc	Continental	BEX	39 6.0 12

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd Hw	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(S6)	10	17	12				12.5281	23.2715	15.8132
Auto(S6)	10	17	13				12.8	23.8	16.1613
Auto(S6)	10	17	12				12.5281	23.2715	15.8132

City	Cylinders	Fuel	Comb	5-C	Guzzler?	Air Aspir	Air Aspira	Trans	Trans Des	Trans, Oth	# Gears
					G	TC	Turbochar	SA	Semi-Automatic		6
					G	TC	Turbochar	SA	Semi-Automatic		6
					G	TC	Turbochar	SA	Semi-Automatic		6

Trans Loc	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - I	Fuel Usag	Fuel Usag
Y	N	A	All Wheel IABEXV06.0501					GP	Gasoline (l
Y	N	A	All Wheel IABEXV06.0501					GP	Gasoline (l
Y	N	A	All Wheel IABEXV06.0501					GP	Gasoline (l

5000	Correlation Effect	Gas Guzzl	Gas Guzzl	2Dr Pass	2Dr Lugg	4Dr Pass	4Dr Lugg	Htchbk P2	Htchbk Lu
MP	leaded Rec per m	nded)	Not exemp	102	13				
MP	leaded Rec per m	nded)	Not exemp	89	11				
MP	leaded Rec per m	nded)	Not exemp	86	7				

Annual Fuel	EPA Calc	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel	Low'd City	Low'd Hw	Low'd Cor	City2 Un
2624	2624						
2422	2422						
2624	2624	Added more base level information.					

Fuel2 Unit	Fuel2 Range2 - Fuel2 Us	Fuel2 Us	Fuel2 Unit	Fuel2 Unit

Alternative Fuel	Engine Displacement	Intake Val	Exhaust Val	Carline CI	Carline CI	Car/Truck	Calc Appr	Sales
		2	2	5	Midsize C	car	Derived 5-	
		2	2	4	Compact C	car	Derived 5-	
		2	2	3	Subcompa	car	Derived 5-	

(b) (4)

Ref ID	DEPA FE L	Mfr Conta	Contact E	Contact Phone
6/3/2009	1048	RICHARD	Richard.Tr	248 754 4213
6/3/2009	1050	RICHARD	Richard.Tr	248 754 4213
6/3/2009	1042	RICHARD	Richard.Tr	248 754 4213

To: roberthart@vw.com[]
Cc: CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Ben Haynes/OU=AA/O=USEPA/C=US@EPA;Vanamburg.David@epamail.epa.gov[]; N=Ben Haynes/OU=AA/O=USEPA/C=US@EPA;Vanamburg.David@epamail.epa.gov[]; anamburg.David@epamail.epa.gov[]
From: CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US
Sent: Mon 7/27/2009 5:04:59 PM
Subject: A3UC-CAF

Hello Bob,

the subject vehicle is scheduled to test on Thursday 7/30/09. I will talk with the lab on Wednesday to try to establish a time. I'll contact you as soon as I know when to expect the vehicle to be tested.

If you have any questions or concerns, please contact Jim Snyder or me.

Thanks,

Vince Mazaitis
(734) 214-4864

To: Vincent Mazaitis/AA/USEPA/US@EPA[]
Cc: Jim Snyder/AA/USEPA/US@EPA[]
From: "Hart, Robert (VWoA)"
Sent: Mon 7/27/2009 6:36:46 PM
Subject: RE: A3UC-CAF

Thanks for the info Vince.

Best regards,

Bob Hart

-----Original Message-----

From: Mazaitis.Vincent@epamail.epa.gov
[mailto:Mazaitis.Vincent@epamail.epa.gov]
Sent: Monday, July 27, 2009 2:03 PM
To: Hart, Robert (VWoA)
Subject: Fw: A3UC-CAF

Let's try this again!

----- Forwarded by Vincent Mazaitis/AA/USEPA/US on 07/27/2009 02:01 PM

From: Vincent Mazaitis/AA/USEPA/US

To: roberthart@vw.com

Cc: Jim Snyder/AA/USEPA/US@EPA, Ben Haynes/AA/USEPA/US@EPA,
Vanamburg.David@epamail.epa.gov

Date: 07/27/2009 01:04 PM

Subject: A3UC-CAF

Hello Bob,

the subject vehicle is scheduled to test on Thursday 7/30/09. I will talk with the lab on Wednesday to try to establish a time. I'll contact you as soon as I know when to expect the vehicle to be tested.

If you have any questions or concerns, please contact Jim Snyder or me.

Thanks,

Vince Mazaitis
(734) 214-4864

To: robert.hart@vw.com[]
Cc: CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]
From: CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US
Sent: Wed 8/5/2009 4:26:29 PM
Subject: Audi Lab Test Data
[Audi A3UC-CAF_US06.pdf](#)
[Audi A3UC-CAF_FTP.pdf](#)
[Audi A3UC-CAF_Hwy.pdf](#)

Hello Bob,

Please find enclosed the Audi Lab data without particulate measurement. We're still working on that.
Sorry for the delays!

If you have any questions, please contact me.

Thanks Bob,

Kind regards,

Vince Mazaitis

mfr

NVFEL Laboratory Test Data

CVS

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2009-0210-007

Vehicle ID: A3UC-CAF

Test Information

Test Date: 7/30/2009

MFR Name: AUDI

Key Start: 14:26:49

MFR Codes: 640

ADX

Fuel Container ID: F00023

Config #: 00

Fuel Type: 61 Tier 2 Cert Gasoline

Transmission: AUTO

Test Procedure: 89 us062bag (us06warmup_2bagus06)

Shift Schedule: A09980041

Calculation Method: Gasoline

Odometer: 004874.0 MI

Pretest Remarks:

Drive Schedule: us06warmup_2bagus06



Bag Data

Phase 1

	HC-FID (ppmC)	CO (ppm)	NOx (ppm)	CO2 (%)	CH4 (ppm)	NonMeth HC (ppmC)
Sample	7.578	62.698	0.410	0.898	2.446	
Ambient	2.528	1.004	0.005	0.040	1.915	
Net Concentration	5.220	61.761	0.406	0.861	0.660	4.478

Remarks:

Phase 2

Sample	5.060	46.959	0.255	1.116	2.101	
Ambient	2.500	1.027	0.005	0.040	1.924	
Net Concentration	2.768	46.018	0.251	1.079	0.339	2.387

Remarks:

Phase 3

Sample
Ambient
Net Concentration

Remarks:

Phase 4

Sample
Ambient
Net Concentration

Remarks:

Results

	HC-FID (gpm)	CO (gpm)	NOx (gpm)	CO2 (gpm)	CH4 (gpm)	NMHC / NMOG (gpm)	Vol MPG (mpg)
Phase 1	0.107	2.547	0.025	557.9	0.016	0.091 / 0.095	15.835
Phase 2	0.025	0.835	0.007	307.5	0.004	0.021 / 0.022	28.822

(NMOG=1.04xNMHC)

Composite 0.04302 1.21477 0.01088 363.112 0.00620 0.0370 / 0.0385

Fuel Economy

Gasoline MPG

Dyno Settings

Dyno #: D329 - FWD

Phase 1 15.81

Phase 2 28.77

Inertia: 4250

EPA Set Co A: 9.67

EPA Set Co B: 0.217

EPA Set Co C: 0.016321

Composite 24.34

Emissions Bench: Mexa 7200dle

NVFEL Laboratory Test Data

CVS

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2009-0210-007

Vehicle ID: A3UC-CAF

Results	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.190	4.528	0.045	991.9	0.028	0.163	1.125
Phase 2	0.155	5.197	0.042	1915.0	0.022	0.134	
Phase 3							
Phase 4							



Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	28.94	28.94		
Avg Cell Temp (degF)	74.37	74.36		
Dew Point (degF)	49.62	49.68		
Specific Humidity (grains/lbm)	54.59	54.71		
NOx Corr Factor	0.9125	0.9129		
CO2 Dilution Factor	14.803	11.954		
CFV Vmix (scf @68F)	2223.43	3425.64		

CVS Flow Rate Avg (scfm) 561.71 563.12

Fan Placement: USO6 Only - One Large Fan - Down - Front

Phase Time (secs)	130.01	365.00	107.51
Distance (miles)	1.778	6.228	
Bag Analysis Time (secs)	82.2	257.1	

MFR Test Results

for Procedure 90 US06

MFR Number	HC	CO	NOx	CO2	NMOG	NonMeth HC
1E+07	0.0395	0.7	0.012	309	0	0.0352

Odometer
4405 M

MPG
28.5

MPG is 17.07 % higher than EPA MPG

MFR Lab: Audi Ingolstadt

Dyno: 8

Fuel: 61 Tier 2 Cert Gasoline

I have validated the data in accordance with the requirements of TP 730

Validated By: _____

62787

Date: _____

7/30/09

mfr

NVFEL Laboratory Test Data

CVS

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2009-0210-009

Vehicle ID: A3UC-CAF

Test Information

Test Date: 7/30/2009

MFR Name: AUDI

Key Start / Hot Soak: 10:30:02 / 09:55

MFR Codes: 640

ADX

Fuel Container ID: F00023

Config #: 00

Fuel Type: 61 Tier 2 Cert Gasoline

Transmission: AUTO

Test Procedure: 21 Federal fuel 2-day exhaust (w/can loa

Shift Schedule: A09980005

Calculation Method: Gasoline

Odometer: 004842.0 MI

Pretest Remarks:

Drive Schedule: ftp3bag

Soak Period: 21.7 hours



Bag Data

Phase 1

	HC-FID (ppmC)	CO (ppm)	NOx (ppm)	CO2 (%)	CH4 (ppm)	NonMeth HC (ppmC)
Sample	12.130	43.921	1.096	0.990	2.986	
Ambient	2.661	1.029	0.007	0.041	1.980	
Net Concentration	9.667	42.968	1.089	0.952	1.153	8.369

Remarks: No PM data available at this time

Phase 2

Sample	2.682	9.693	0.125	0.669	1.883	
Ambient	2.631	0.000	0.003	0.041	1.990	
Net Concentration	0.182	9.693	0.122	0.630	-0.007	0.182

Remarks:

Phase 3

Sample	3.050	9.716	0.372	0.881	1.900	
Ambient	2.638	0.000	0.005	0.040	1.976	
Net Concentration	0.586	9.716	0.367	0.843	0.054	0.524

Remarks:

Phase 4

Sample
Ambient
Net Concentration

Remarks: This test has particulate results.

Results

	HC-FID (gpm)	CO (gpm)	NOx (gpm)	CO2 (gpm)	CH4 (gpm)	NMHC / NMOG (gpm)	Vol MPG (mpg)
Phase 1	0.123	1.107	0.042	385.4	0.017	0.107 / 0.111	22.974
Phase 2	0.004	0.399	0.007	407.8	0.000	0.004 / 0.004	21.800
Phase 3	0.007	0.250	0.014	340.8	0.001	0.007 / 0.007	26.096
Weighted	0.02957	0.50489	0.01644	384.688	0.00375	(NMOG=1.04xNMHC) 0.0259 / 0.0270	

Fuel Economy

	Gasoline MPG	No PM data avai	Dyno Settings	Dyno #: D329 - FWD
Phase 1	22.93			Inertia: 4250
Phase 2	21.76			EPA Set Co A: 9.67
Phase 3	26.05			EPA Set Co B: 0.217
Weighted	23.03			EPA Set Co C: 0.016321
				Emissions Bench: Mexa 7200dle


NVFEL Laboratory Test Data

CVS

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2009-0210-009

Vehicle ID: A3UC-CAF

Results	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
 Phase 1	0.443	3.980	0.150	1385.6	0.061	0.384	1.125
Phase 2	0.014	1.538	0.029	1571.6	0.000	0.014	
Phase 3	0.027	0.898	0.051	1224.6	0.003	0.024	
Phase 4							

Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	28.96	28.97	28.97	
Avg Cell Temp (degF)	75.26	75.29	75.47	
Dew Point (degF)	49.14	49.07	49.13	
Specific Humidity (grains/lbm)	53.58	53.41	53.55	
NOx Corr Factor	0.9085	0.9079	0.9084	
CO2 Dilution Factor	13.460	19.993	15.189	
CFV Vmix (scf @68F)	2809.41	4811.59	2802.87	
Total Vmix (scf@68F)	2809.41	4811.59	2802.87	
CVS Flow Rate Avg (scfm)	332.28	331.72	331.70	
Fan Placement: One Fan - Up - Front				
Phase Time (secs)	507.30	870.30	507.00	
Distance (miles)	3.595	3.854	3.594	
Bag Analysis Time (secs)	951.4	148.5	89.6	

MFR Test Results

for Procedure 21 Federal fuel 2-day exhaust (w/can load)

MFR Number	HC	CO	NOx	CO2	NMOG	NonMeth HC
1E+07	0.0199	0.43	0.017	351	0	0.0172

Odometer
4374 M

MPG
25.1

MPG is 8.99 % higher than EPA MPG

MFR Lab: Audi Ingolstadt

Dyno: 8

Fuel: 61 Tier 2 Cert Gasoline

I have validated the data in accordance with the requirements of TP 730

Validated By:

2136

Date:

8/4/09

NVFEL Laboratory Test Data

CVS

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2009-0210-006

Vehicle ID: A3UC-CAF

Test Information



Test Date: 7/30/2009

Key Start: 13:25:03

Fuel Container ID: F00023

Fuel Type: 61 Tier 2 Cert Gasoline

Test Procedure: 03 HWFET (hwfetprep_hwfet)

Calculation Method: Gasoline

Pretest Remarks:

MFR Name: AUDI

MFR Codes: 640 ADX

Config #: 00

Transmission: AUTO

Shift Schedule: A09980011

Odometer: 004853.0 MI

Drive Schedule: hwfet_hwfet

Bag Data

Phase 1

Sample
Ambient
Net Concentration

HC-FID

(ppmC)

4.116

2.667

1.671

CO

(ppm)

28.784

1.064

27.809

NOx

(ppm)

0.147

0.007

0.141

CO2

(%)

1.111

0.040

1.075

CH4

(ppm)

2.007

1.942

0.226

NonMeth HC

(ppmC)

1.416

Remarks: No PM data available at this time

Phase 2

Sample
Ambient
Net Concentration

Remarks:

Phase 3

Sample
Ambient
Net Concentration

Remarks:

Phase 4

Sample
Ambient
Net Concentration

Remarks: This test has particulate results.

Results

Phase 1

HC-FID

(gpm)

0.011

CO

(gpm)

0.375

NOx

(gpm)

0.003

CO2

(gpm)

227.6

CH4

(gpm)

0.002

NMHC / NMOG

(gpm)

0.009 / 0.010

Vol MPG

(mpg)

39.006

(NMOG=1.04xNMHC)

Fuel Economy

Phase 1

Gasoline MPG

38.93

No PM data avai

Dyno Settings

Dyno #: D329 - FWD

Inertia: 4250

EPA Set Co A: 9.67

EPA Set Co B: 0.217

EPA Set Co C: 0.016321

Emissions Bench: Mexa 7200dle

NVFEL Laboratory Test Data

CVS

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2009-0210-006

Vehicle ID: A3UC-CAF

Results	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
---------	-------------------	---------------	----------------	----------------	----------------	-----------------	---------------



Phase 1
Phase 2
Phase 3
Phase 4

0.115 3.851 0.029 2339.0 0.018 0.097

1.125

Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	28.96			
Avg Cell Temp (degF)	75.40			
Dew Point (degF)	50.43			
Specific Humidity (grains/lbm)	56.25			
NOx Corr Factor	0.9190			
CO2 Dilution Factor	12.021			
CFV Vmix (scf @68F)	4200.65			
Total Vmix (scf@68F)	4200.65			
CVS Flow Rate Avg (scfm)	329.46			

Fan Placement: One Fan - Down - Front

Phase Time (secs)	765.01
Distance (miles)	10.276
Bag Analysis Time (secs)	311.6

MFR Test Results

for Procedure 3 HWFE

MFR Number	HC	CO	NOx	CO2	NMOG	NonMeth HC
1E+07	0.011	0.35	0.004	216	0	0.009

Odometer
4385 M

MPG
40.8

MPG is 4.79 % higher than EPA MPG

MFR Lab: Audi Ingolstadt

Dyno: 8
Fuel: 61 Tier 2 Cert Gasoline

I have validated the data in accordance with the requirements of TP 730

Validated By: 21366 Date: 8/4/09

To: robert.hart@vw.com[]
Cc: CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]
From: CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US
Sent: Thur 8/6/2009 1:20:35 PM
Subject: 756-0-0012-10
[VW 756-0-0012-10 US06.pdf](#)
[VW 756-0-0012-10 FTP.pdf](#)
[VW 756-0-0012-10 Hwy.pdf](#)

Good morning again Bob,

Please find enclosed the Lab test results for the subject vehicle. If you have any questions or concerns, please contact me.

Thanks Bob,

Kind regards,

Vince Mazaitis

CERT

NVFEL Laboratory Test Data

CVS

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2009-0229-006

Vehicle ID: 756 0-0012/10

Test Information



Test Date: 8/5/2009

Key Start: 11:04:59

Fuel Container ID: F00023

Fuel Type: 61 Tier 2 Cert Gasoline

Test Procedure: 89 us062bag (us06warmup_2bagus06)

Calculation Method: Gasoline

Pretest Remarks:

MFR Name: VOLKSWAGEN

MFR Codes: 590 VWX

Config #: 00

Transmission: AUTO

Shift Schedule: A09980041

Odometer: 004436.0 MI

Drive Schedule: us06warmup_2bagus06

Bag Data

	HC-FID	CO	NOx	CO2	CH4	NonMeth HC
	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)
Phase 1						
Sample	9.791	229.148	0.491	0.915	3.225	
Ambient	3.110	0.013	0.006	0.044	1.876	
Net Concentration	6.900	229.135	0.485	0.875	1.480	5.217

Remarks:

Phase 2

Sample	6.591	118.420	0.348	1.230	2.357	
Ambient	3.123	0.219	0.016	0.045	1.877	
Net Concentration	3.758	118.221	0.333	1.189	0.654	3.015

Remarks:

Phase 3

Sample	
Ambient	
Net Concentration	

Remarks:

Phase 4

Sample	
Ambient	
Net Concentration	

Remarks:

Results

	HC-FID	CO	NOx	CO2	CH4	NMHC / NMOG	Vol MPG
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.193	12.949	0.041	776.6	0.048	0.146 / 0.152	11.163
Phase 2	0.046	2.896	0.012	457.9	0.009	0.037 / 0.038	19.245
Composite	0.07818	5.11628	0.01841	528.303	0.01773	(NMOG=1.04xNMHC) 0.0607 / 0.0632	

Fuel Economy

	Gasoline MPG	Dyno Settings	Dyno #:
Phase 1	11.14		D002
Phase 2	19.21		Inertia: 5500
			EPA Set Co A: 18.2
			EPA Set Co B: 0.08
			EPA Set Co C: 0.0302
Composite	16.57		Emissions Bench: D002

v090530 - d002 EPAVDAEm090805104047

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NVFEL Laboratory Test Data

CVS

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2009-0229-006

Vehicle ID: 756 0-0012/10

Results	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.342	22.932	0.072	1375.3	0.085	0.259	1.137
Phase 2	0.285	18.096	0.076	2861.2	0.057	0.229	
Phase 3							
Phase 4							



Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	29.14	29.14		
Avg Cell Temp (degF)	76.67	76.73		
Dew Point (degF)	48.54	48.56		
Specific Humidity (grains/lbm)	52.04	52.07		
NOx Corr Factor	0.9026	0.9027		
CO2 Dilution Factor	14.265	10.782		
CFV Vmix (scf @68F)	3035.45	4642.79		

CVS Flow Rate Avg (scfm) 767.82 763.20

Fan Placement: US06 Only - One Large Fan - Down - Front

Phase Time (secs)	130.00	365.00	107.21
Distance (miles)	1.771	6.248	
Bag Analysis Time (secs)	84.8	271.3	

MFR Test Results

for Procedure 90 US06

MFR Number	HC	CO	NOx	CO2	NMOG	NonMeth HC
1E+07	0.0242	1.69	0.016	495	0	0.0184

Odometer 4193 M
MPG 17.8

MFR Lab: Volkswagen AG, Dept EASZ/1

MPG is 7.42 % higher than EPA MPG

Dyno: 21
Fuel: 61 Tier 2 Cert Gasoline

Road load ABC, zero span/5, Tail pipe BP OK 05-5-09

I have validated the data in accordance with the requirements of TP 730

Validated By: *[Signature]*

Date: *8-5-09*

NVFEL Laboratory Test Data

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2009-0229-004

Vehicle ID: 756 0-0012/10

Test Information



Test Date: 8/5/2009

MFR Name: VOLKSWAGEN

Key Start / Hot Soak: 08:59:04 / 09:55

MFR Codes: 590 VWX

Fuel Container ID: F00023

Config #: 00

Fuel Type: 61 Tier 2 Cert Gasoline

Transmission: AUTO

Test Procedure: 21 Federal fuel 2-day exhaust (w/can loa

Shift Schedule: A09980005

Calculation Method: Gasoline

Odometer: 004405.0 MI

Pretest Remarks:

Drive Schedule: ftp3bag

Soak Period: 22.6 hours

Bag Data

Phase 1

	HC-FID (ppmC)	CO (ppm)	NOx (ppm)	CO2 (%)	CH4 (ppm)	NonMeth HC (ppmC)
Sample	9.197	18.119	0.924	0.855	2.484	
Ambient	3.302	0.269	0.028	0.043	1.905	
Net Concentration	6.107	17.868	0.898	0.815	0.701	5.309

Remarks:

Phase 2

Sample	3.237	0.867	0.155	0.566	1.862	
Ambient	3.234	0.216	0.015	0.041	1.880	
Net Concentration	0.140	0.659	0.141	0.526	0.061	0.070

Remarks:

Phase 3

Sample	4.134	1.883	0.813	0.754	2.100	
Ambient	3.594	0.259	0.016	0.041	1.874	
Net Concentration	0.742	1.638	0.798	0.716	0.331	0.366

Remarks:

Phase 4

Sample	
Ambient	
Net Concentration	

Remarks:

Results

	HC-FID (gpm)	CO (gpm)	NOx (gpm)	CO2 (gpm)	CH4 (gpm)	NMHC / NMOG (gpm)	Vol MPG (mpg)
Phase 1	0.131	0.772	0.057	553.9	0.017	0.114 / 0.118	16.027
Phase 2	0.005	0.045	0.014	568.4	0.002	0.002 / 0.002	15.660
Phase 3	0.016	0.070	0.051	483.3	0.008	0.008 / 0.008	18.414
Weighted	0.03389	0.20286	0.03326	542.030	0.00709	(NMOG=1.04xNMHC) 0.0269 / 0.0280	

Fuel Economy

	Gasoline MPG	Dyno Settings	Dyno #: D002
Phase 1	16.00		Inertia: 5500
Phase 2	15.63		EPA Set Co A: 18.2
Phase 3	18.38		EPA Set Co B: 0.08
			EPA Set Co C: 0.0302
Weighted	16.38		Emissions Bench: D002

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NVFEL Laboratory Test Data

CVS

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2009-0229-004

Vehicle ID: 756 0-0012/10

Results	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.470	2.777	0.206	1991.7	0.062	0.409	1.137
Phase 2	0.018	0.175	0.056	2198.1	0.009	0.009	
Phase 3	0.057	0.254	0.183	1741.1	0.029	0.028	
Phase 4							



Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	29.13	29.14	29.14	
Avg Cell Temp (degF)	75.46	75.61	75.60	
Dew Point (degF)	47.89	48.44	48.26	
Specific Humidity (grains/lbm)	50.79	51.85	51.49	
NOx Corr Factor	0.8978	0.9019	0.9005	
CO2 Dilution Factor	15.616	23.675	17.753	
CFV Vmix (scf @68F)	4714.48	8065.82	4694.35	
CVS Flow Rate Avg (scfm)	557.60	555.94	555.43	
Fan Placement: One Fan - Down - Front				
Phase Time (secs)	507.30	870.50	507.10	
Distance (miles)	3.596	3.867	3.602	
Bag Analysis Time (secs)	81.1	75.4	75.4	

MFR Test Results

for Procedure 21 Federal fuel 2-day exhaust (w/can load)

MFR Number	HC	CO	NOx	CO2	NMOG	NonMeth HC
1E+07	0.0287	0.21	0.033	509	0	0.0229

Odometer 4161 M
MPG 17.4

MFR Lab: Volkswagen AG, Dept EASZ/1

Rundland ABC, zero span 13, tailpipe BP OK 8-5-09
MPG is 6.21 % higher than EPA MPG
Dyno: 21
Fuel: 61 Tier 2 Cert Gasoline

I have validated the data in accordance with the requirements of TP 730

Validated By: *[Signature]*

Date: *8-5-09*

CERT

NVFEL Laboratory Test Data

CVS

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2009-0229-005

Vehicle ID: 756 0-0012/10

Test Information



Test Date: 8/5/2009

Key Start: 10:14:23

Fuel Container ID: F00023

Fuel Type: 61 Tier 2 Cert Gasoline

Test Procedure: 03 HWFET (hwfetprep_hwfet)

Calculation Method: Gasoline

Pretest Remarks:

MFR Name VOLKSWAGEN

MFR Codes: 590 VWX

Config #: 00

Transmission: AUTO

Shift Schedule: A09980011

Odometer: 004416.0 MI

Drive Schedule: hwfet_hwfet

Bag Data

Phase 1

	HC-FID (ppmC)	CO (ppm)	NOx (ppm)	CO2 (%)	CH4 (ppm)	NonMeth HC (ppmC)
Sample	3.539	2.615	0.175	1.490	1.919	
Ambient	3.324	0.229	0.012	0.044	1.865	
Net Concentration	0.585	2.411	0.164	1.451	0.261	0.287

Remarks:

Phase 2

Sample
Ambient
Net Concentration

Remarks:

Phase 3

Sample
Ambient
Net Concentration

Remarks:

Phase 4

Sample
Ambient
Net Concentration

Remarks:

Results

	HC-FID (gpm)	CO (gpm)	NOx (gpm)	CO2 (gpm)	CH4 (gpm)	NMHC / NMOG (gpm)	Vol MPG (mpg)
Phase 1	0.004	0.037	0.004	351.2	0.002	0.002 / 0.002	25.343

(NMOG=1.04xNMHC)


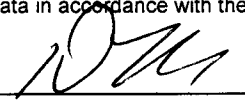
Fuel Economy

	Gasoline MPG		Dyno Settings	Dyno #:
Phase 1	25.30	16.33		D002
		16.19		Inertia: 5500
		16.09		EPA Set Co A: 18.2
				EPA Set Co B: 0.08
				EPA Set Co C: 0.0302
		16.20		Emissions Bench: D002

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NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data							
Test Number: 2009-0229-005				Vehicle ID: 756 0-0012/10			
Results	<u>HC-FID</u> (grams)	<u>CO</u> (grams)	<u>NOx</u> (grams)	<u>CO2</u> (grams)	<u>CH4</u> (grams)	<u>NMHC</u> (grams)	<u>Meth Response</u>
	Phase 1	0.046	0.382	0.039	3608.1	0.024	0.023
	Phase 2						
	Phase 3						
	Phase 4						
							1.137
Test Conditions							
		<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>		
Barometer (inHg)		29.14					
Avg Cell Temp (degF)		75.98					
Dew Point (degF)		49.00					
Specific Humidity (grains/lbm)		52.95					
NOx Corr Factor		0.9061					
CO2 Dilution Factor		8.991					
CFV Vmix (scf @68F)		4799.59					
CVS Flow Rate Avg (scfm)		376.44					
Fan Placement: One Fan - Down - Front							
Phase Time (secs)		1057.20					
Distance (miles)		10.273					
Bag Analysis Time (secs)		77.4					
MFR Test Results for Procedure 3 HWFE							
<u>MFR Number</u>	<u>HC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>NMOG</u>	<u>NonMeth HC</u>	
1E+07	0.0014	0.02	0.005	323	0	0.0003	
<u>Odometer</u>	<u>MPG</u>						
4172 M	27.4						
MPG is 8.32 % higher than EPA MPG				MFR Lab: Volkswagen AG, Dept EASZ/1			
Dyno: 21 Fuel: 61 Tier 2 Cert Gasoline				OK 8-5-09			
I have validated the data in accordance with the requirements of TP 730							
Validated By: 				Date: 8-5-09			

To: "Hart, Robert (VWoA)" [Robert.Hart@vw.com]
Cc: CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]
From: CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US
Sent: Thur 8/6/2009 6:04:05 PM
Subject: Re: Confirmatory Test Results for Jetta - VW35100052/10
[VW Jetta US06.pdf](#)
[Jetta FTP.pdf](#)
[VW Jetta Hwy.pdf](#)
<mailto:robert.hart@vw.com>

Hello Bob,

Please find enclosed the Jetta Lab results. Note the fuel economy was > 3% for the Hwy. (EPA fuel economy was larger). As you know, your options are to accept the Manufacturers fuel economy values or retest the Highway. If you have any questions or concerns, please contact Jim Snyder or me.

Thanks Bob,

Vince Mazaitis

From: "Hart, Robert (VWoA)" <Robert.Hart@vw.com>
To: Vincent Mazaitis/AA/USEPA/US@EPA
Date: 08/06/2009 11:48 AM
Subject: Confirmatory Test Results for Jetta - VW35100052/10

Hello Vince,

I just realized that the test results are probably going to the person that submitted the original test waiver request. For the Jetta that would be Bill Rodgers and he is on vacation. Please send a copy of the results to me.

Best regards,

Bob Hart

Robert Hart

Emissions & Regulatory Analyst

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4224

Fax: 248 754 4207

<mailto:robert.hart@vw.com>

CERT

CVS

NVFEL Laboratory Test Data

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2009-0236-003

Vehicle ID: VW35100052/10

Test Information



Test Date: 8/5/2009

MFR Name: VOLKSWAGEN

Key Start: 14:40:27

MFR Codes: 590 VWX

Fuel Container ID: F00023

Config #: 03

Fuel Type: 61 Tier 2 Cert Gasoline

Transmission: AUTO

Test Procedure: 89 us062bag (us06warmup_2bagus06)

Shift Schedule: A09980041

Calculation Method: Gasoline

Odometer: 004846.0 MI

Pretest Remarks:

Drive Schedule: us06warmup_2bagus06

Bag Data

	HC-FID	CO	NOx	CO2	CH4	NonMeth HC
Phase 1	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)
Sample	5.448	8.677	0.676	0.731	2.236	
Ambient	3.573	0.306	0.002	0.041	1.862	
Net Concentration	2.071	8.388	0.674	0.693	0.476	1.530

Remarks:

Phase 2

Sample	5.092	11.933	0.279	1.038	2.235	
Ambient	3.603	0.319	0.010	0.041	1.861	
Net Concentration	1.769	11.639	0.270	1.000	0.518	1.179

Remarks:

Phase 3

Sample
Ambient
Net Concentration

Remarks:

Phase 4

Sample
Ambient
Net Concentration

Remarks:

Results

	HC-FID	CO	NOx	CO2	CH4	NMHC / NMOG	Vol MPG
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.044	0.360	0.043	467.0	0.012	0.033 / 0.034	19.036
Phase 2	0.015	0.203	0.007	273.9	0.005	0.010 / 0.011	32.466

(NMOG=1.04xNMHC)

Composite 0.02167 0.23781 0.01502 316.932 0.00663 0.0152 / 0.0158

Fuel Economy

Gasoline MPG

Dyno Settings

Dyno #: D002

Phase 1 19.00

Inertia: 3250

Phase 2 32.41

EPA Set Co A: -2.96

EPA Set Co B: 0.2131

EPA Set Co C: 0.01754

Composite 27.99

Emissions Bench: D002

v090530 - d002 EPAVDAEm090805140921

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NVFEL Laboratory Test Data

CVS

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2009-0236-003

Vehicle ID: VW35100052/10

Results	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.079	0.643	0.077	835.0	0.021	0.058	1.137
Phase 2	0.095	1.264	0.044	1706.2	0.032	0.063	
Phase 3							
Phase 4							



Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	29.13	29.13		
Avg Cell Temp (degF)	75.57	75.25		
Dew Point (degF)	49.06	48.57		
Specific Humidity (grains/lbm)	53.10	52.12		
NOx Corr Factor	0.9067	0.9029		
CO2 Dilution Factor	18.286	12.889		
CFV Vmix (scf @68F)	2326.38	3292.68		

CVS Flow Rate Avg (scfm) 545.03 541.41

Fan Placement: USO6 Only - One Large Fan - Up - Front

Phase Time (secs)	130.00	364.90	126.11
Distance (miles)	1.788	6.230	
Bag Analysis Time (secs)	82.3	289.6	

MFR Test Results

for Procedure 90 US06

MFR Number	HC	CO	NOx	CO2	NMOG	NonMeth HC
1E+07	0.0191	0.309	0.0159	309	0	0.012

Odometer
4690 M MPG
28.5

MPG is 1.81 % higher than EPA MPG

MFR Lab: Volkswagen AG, Dept EASZ/1

Dyno: 21
Fuel: 61 Tier 2 Cert Gasoline


I have validated the data in accordance with the requirements of TP 730

Validated By: _____

Date: _____

8-5-09

CERT

NVFEL Laboratory Test Data							CVS
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data							
Test Number: 2009-0236-001		Vehicle ID: VW35100052/10					
	Test Date: 8/5/2009		MFR Name: VOLKSWAGEN				
	Key Start / Hot Soak: 12:36:44 / 09:59		MFR Codes: 590 VWX				
	Fuel Container ID: F00023		Config #: 03				
	Fuel Type: 61 Tier 2 Cert Gasoline		Transmission: AUTO				
	Test Procedure: 21 Federal fuel 2-day exhaust (w/can loa		Shift Schedule: A09980005				
	Calculation Method: Gasoline		Odometer: 004815.0 MI				
Pretest Remarks:		Drive Schedule: ftp3bag					
		Soak Period: 21.9 hours					
Bag Data							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>	
Phase 1	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
Sample	19.106	63.856	0.913	0.698	2.703		
Ambient	3.001	0.287	0.000	0.041	1.874		
Net Concentration	16.263	63.585	0.913	0.659	0.928	15.208	
Remarks:							
Phase 2							
Sample	2.973	1.561	0.002	0.457	1.813		
Ambient	2.974	0.229	0.000	0.040	1.858		
Net Concentration	0.100	1.340	0.002	0.418	0.018	0.079	
Remarks:							
Phase 3							
Sample	3.034	4.357	0.110	0.624	1.868		
Ambient	2.911	0.267	0.004	0.040	1.859		
Net Concentration	0.259	4.102	0.106	0.585	0.096	0.150	
Remarks:							
Phase 4							
Sample							
Ambient							
Net Concentration							
Remarks:							
Results							
	<u>HC-FID</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC / NMOG</u>	<u>Vol MPG</u>
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	0.243	1.915	0.041	311.9	0.016	0.227 / 0.236	28.200
Phase 2	0.002	0.065	0.000	316.7	0.001	0.002 / 0.002	28.099
Phase 3	0.004	0.123	0.005	275.5	0.002	0.002 / 0.002	32.297
Weighted	0.05268	0.46496	0.00980	304.365	0.00404	(NMOG=1.04xNMHC) 0.0487 / 0.0507	
Fuel Economy							
	<u>Gasoline MPG</u>				<u>Dyno Settings</u>		
Phase 1	28.15				Dyno #: D002		
Phase 2	28.05				Inertia: 3250		
Phase 3	32.24				EPA Set Co A: -2.96		
					EPA Set Co B: 0.2131		
					EPA Set Co C: 0.01754		
Weighted	29.15				Emissions Bench: D002		
v090530 - d002 EPAVDAEm090805121948 Page 1 of 2 Print Time 05-Aug-2009 13:29							

NVFEL Laboratory Test Data

CVS

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2009-0236-001

Vehicle ID: VW35100052/10

Results	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.867	6.842	0.145	1114.6	0.057	0.811	1.137
Phase 2	0.009	0.247	0.000	1211.4	0.002	0.007	
Phase 3	0.014	0.440	0.017	986.1	0.006	0.008	
Phase 4							



Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	29.15	29.14	29.14	
Avg Cell Temp (degF)	75.52	75.63	75.75	
Dew Point (degF)	48.44	48.14	48.46	
Specific Humidity (grains/lbm)	51.83	51.25	51.89	
NOx Corr Factor	0.9018	0.8996	0.9020	
CO2 Dilution Factor	18.978	29.307	21.463	
CFV Vmix (scf @68F)	3263.87	5595.22	3252.60	
CVS Flow Rate Avg (scfm)	386.03	385.08	384.62	
Fan Placement: One Fan - Up - Front				
Phase Time (secs)	507.30	871.80	507.40	
Distance (miles)	3.573	3.825	3.580	
Bag Analysis Time (secs)	79.1	75.4	75.4	

MFR Test Results

for Procedure 21 Federal fuel 2-day exhaust (w/can load)

MFR Number	HC	CO	NOx	CO2	NMOG	NonMeth HC
1E+07	0.047	0.455	0.0111	310	0	0.0434

Odometer
4658 M

MPG
28.4

MPG is -2.56 % lower than EPA MPG

MFR Lab: Volkswagen AG, Dept EASZ/1

Dyno: 21

Fuel: 61 Tier 2 Cert Gasoline

I have validated the data in accordance with the requirements of TP 730


Validated By:

David A. Van der Valk

Date:

8-5-09

CER

NVFEL Laboratory Test Data								CVS
Final Laboratory Test Results- Refer to VERIFY Reports for Official Data								
Test Information		Test Number: 2009-0236-002 Test Date: 8/5/2009 Key Start: 13:51:07 Fuel Container ID: F00023 Fuel Type: 61 Tier 2 Cert Gasoline Test Procedure: 03 HWFET (hwfetprep_hwfet) Calculation Method: Gasoline Pretest Remarks:			Vehicle ID: VW35100052/10 MFR Name: VOLKSWAGEN MFR Codes: 590 VWX Config #: 03 Transmission: AUTO Shift Schedule: A09980011 Odometer: 004826.0 MI Drive Schedule: hwfet_hwfet			
								
Bag Data		HC-FID	CO	NOx	CO2	CH4	NonMeth HC	
Phase 1		(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
Sample		4.208	12.664	0.349	1.396	2.129		
Ambient		3.285	1.018	0.013	0.042	1.858		
Net Concentration		1.265	11.753	0.337	1.358	0.465	0.736	
Remarks:								
Phase 2								
Sample								
Ambient								
Net Concentration								
Remarks:								
Phase 3								
Sample								
Ambient								
Net Concentration								
Remarks:								
Phase 4								
Sample								
Ambient								
Net Concentration								
Remarks:								
Results		HC-FID	CO	NOx	CO2	CH4	NMHC / NMOG	Vol MPG
		(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1		0.006	0.115	0.005	209.4	0.003	0.004 / 0.004	42.467
		(NMOG=1.04xNMHC)						
Fuel Economy		Gasoline MPG			Dyno Settings		Dyno #: D002	
Phase 1		42.39			19.15		Inertia: 3250	
					19.20		EPA Set Co A: -2.96	
					19.24		EPA Set Co B: 0.2131	
							EPA Set Co C: 0.01754	
					19.19		Emissions Bench: D002	

NVFEL Laboratory Test Data

CVS

Final Laboratory Test Results- Refer to VERIFY Reports for Official Data

Test Number: 2009-0236-002

Vehicle ID: VW35100052/10

Results	HC-FID (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	0.063	1.182	0.050	2146.0	0.027	0.037	1.137
Phase 2							
Phase 3							
Phase 4							



Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	29.14			
Avg Cell Temp (degF)	75.69			
Dew Point (degF)	48.67			
Specific Humidity (grains/lbm)	52.30			
NOx Corr Factor	0.9036			
CO2 Dilution Factor	9.591			
CFV Vmix (scf @68F)	3050.75			

CVS Flow Rate Avg (scfm) 239.27

Fan Placement: One Fan - Up - Front
 Phase Time (secs) 1057.20
 Distance (miles) 10.246
 Bag Analysis Time (secs) 77.4

MFR Test Results

for Procedure 3 HWFE

MFR Number	HC	CO	NOx	CO2	NMOG	NonMeth HC
1E+07	0.003	0.148	0.0034	219	0	0.0021

Odometer 4669 M
 MPG 40.3

MFR Lab: Volkswagen AG, Dept EASZ/1

MPG is -4.93 % lower than EPA MPG

Dyno: 21
 Fuel: 61 Tier 2 Cert Gasoline

And load ABC, response is, tail pipe BP OK 8-5-09

I have validated the data in accordance with the requirements of TP 730

Validated By:

[Signature]

Date:

8-5-09

To:

doug.devries@gm.com;laura.l.parker@gm.com;gheiser@ford.com;elarue1@ford.com;jcusuman@ford.com;jdf14@chrysler.com;asw9@chrysler.com;KhanF@NRD.NISSAN-USA.COM;ogumah@ntcna.nissan-usa.com;richard.thomas@vw.com;christoph.kohnen@vw.com>;shaun.roopnarine@mbusa.com;john.healey@mbusa.com[];
aura.l.parker@gm.com;gheiser@ford.com;elarue1@ford.com;jcusuman@ford.com;jdf14@chrysler.com;asw9@chrysler.com;KhanF@NRD.NISSAN-USA.COM;ogumah@ntcna.nissan-usa.com;richard.thomas@vw.com;christoph.kohnen@vw.com>;shaun.roopnarine@mbusa.com;john.healey@mbusa.com[];
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Cc: CN=Mary Manners/OU=AA/O=USEPA/C=US@EPA;CN=Holly Pugliese/OU=AA/O=USEPA/C=US@EPA;CN=Christine Mikolajczyk/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Ching-Shih Yang/OU=AA/O=USEPA/C=US@EPA;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]; N=Holly Pugliese/OU=AA/O=USEPA/C=US@EPA;CN=Christine Mikolajczyk/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Ching-Shih Yang/OU=AA/O=USEPA/C=US@EPA;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]; N=Christine Mikolajczyk/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Ching-Shih Yang/OU=AA/O=USEPA/C=US@EPA;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Ching-Shih

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Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]
From: CN=David Good/OU=AA/O=USEPA/C=US
Sent: Fri 8/7/2009 2:24:24 PM
Subject: Fw: Help with the Cas for clunkers - round 3 - Please respond with answers to our questions or the missing data in the attached spread sheet
[OEM question list 08 07 2009.xls](#)

All,

Please call or email me if you have questions. We need answers by Monday 8/10/09 or earlier---if possible.

Thanks

Dave

----- Forwarded by David Good/AA/USEPA/US on 08/07/2009 10:18 AM -----

From: Jim Snyder/AA/USEPA/US
To: David Good/AA/USEPA/US@EPA, Ching-Shih Yang/AA/USEPA/US@EPA, Joel Ball/AA/USEPA/US@EPA
Date: 08/07/2009 09:44 AM
Subject: questions for OEMS

Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

To EPA	Status	On Cars.govY or N?	Note
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need to ask OEM

101	7/31/09	Ford: Is there a M4 in 85 or 86?	N	M4 not listed in 85 or 86 (84is listed)
110	7/31/09	Saab:Need data on 900 2.0L tbo	N	
121	8/3/09	Ask Ford		From call/ voicemail
131	8/4/2009	GM: is there a 5.7L Brougham?	N	no 5.7L listed for87 Brougham, only 5.0L
159	8/4/2009	Ford: F250 w/7.5L a LDT?	N	7.5L is Probably over 8500
221	8/4/2009	Check with Chrysler	N	Power Ram50 is the 4wd version, but we have i
225	8/4/2009	>8500?	N	Configuration exists as a diesel, but can't get G'
232	8/4/2009	Check with Ford	N	No such configuration in our records.
241	8/4/2009	See #159 above	N	Engine exists according to Alldatapro, but not in
242	8/4/2009	See #159 above	N	Engine exists according to Alldatapro, but not in
125	8/3/09			Congressional
248	8/4/2009	GM: what's a G2?	N	Can't find info for G2
272	8/4/2009	Ask VW	N	Only A6 avant quattro listed with 3 L AWD no F'
273	8/4/2009	Ask GM	N	Only 2wd Escalade Hybrid 4wd has 7500 GVW
278	8/4/2009	Ask GM	N	GVW 7200 Curb 5645
290	8/4/2009	Ask GM	N	GVW 7400 Curb 5836
331	8/4/2009	Ask Ford		
419	8/5/2009	Ask mercedes	n	
430	8/5/2009	Ask Nissan	N	no 1.8L truck sold in 86
509	8/5/2009	ask GM	?	no M4 listed, could be a M5 w/creeper?

Year	Manufacturer	carline name	car/truck	displ	no cyl	drive	fuel	trans	Comment
1985	Ford	Bronco		5.8	8			M(4)	
1994	Saab	900		2.0				M(5)	2.0 Turbo in in Fuelec
1988	Ford	E250 Regular Club Wagon XLT		7.5	8			A	
1987	Cadillac	Fleetwood Broughman		5.7	8	rear-wh	Gasol	4-speed automatic	
1987	ford	f250		7.5	8	4-wheel	gas	4-speed manual	
1985	Dodge	comple vehicle with 3-speed automatic transmission		2.6	4	WD	gasol	3 speed automatic	
1987	ford	urb right info		7.5	8	rear-wh	gasol	3 speed automatic	
1988	ford	E-250 Club Wagon		7.5	8	rear-wh	gasol	3 speed automatic	
1988	ford	f-250		5.8	8	2-wheel	gas	5-speed manual	
d's	1988 FORD	over 8500 g		7.5	8	4	WHEEL	GAS 3 SPEED AUTOMATIC	
d's	1988 FORD	over 8500 g		7.5	8	4	wheel	gasol	5-speed manual
1994	Nissan	Maxima GXE							Site lists premium fuel but should be regular; SE u
1988	gmc	g2 van		5.7	8	rear wh	gas	auto	
2009	Audi	A6	car	3.1	6	front-wl	Gas	CVT	Audi A6 3.2 CVT
2009	Cadillac	Escalade Hybrid	Truck 1 (S	5.3	8	4 wheel	gasol	automatselectable transfe	
2009	Chevrolet	Avalanche 1500 4WD	truck 2	5.3	8	4-wheel	gasol	automatic	
2009	Chevrolet	Suburban		5.3	8	four-wh	gasol	6-speed automatic	
2009	Ford	Freestyle		3	6	AWD	Gas	5 auto	
1986	mercedes	300 sdi		3.5	6	4-wheel	diesel	5 speed :turbocharger	
1986	Nissan	King Cab		1.8	4	rear wh	gasol	4-speed automatic	
1992	chevrolet	silverado 1500		4.3	6	real wh	gasol	4 speed manual	

Unadjusted 4-decimal values			Old label values			New label values (2008 method)			Source of data
<u>City</u>	<u>Hwy</u>	<u>Combined</u>	<u>City</u>	<u>Hwy</u>	<u>Combined</u>	<u>City</u>	<u>Hwy</u>	<u>Combined</u>	

conomy.gov under convertible only should be in 900 also

ses premium fuel

r case has 2 wheel drive mode

vtec

GM Media Online

To: richard.thomas@vw.com[]
Cc: christoph.kohnen@vw.com>;CN=Linc
Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Mary
Manners/OU=AA/O=USEPA/C=US@EPA;CN=Holly
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From: CN=David Good/OU=AA/O=USEPA/C=US
Sent: Fri 8/7/2009 6:47:52 PM

Subject: re: 2009 & 2010 FE Guide data for web posting - Please review & correct Verify data base if necessary

VW 2009-2010FEguide-all rel dates-w sales-8-5-09.xls

Audi 2009-2010FEguide-all rel dates-w sales-8-5-09.xls

Bentley 2009-2010FEguide-all rel dates-w sales-8-5-09.xls

Bugatti 2009-2010FEguide-all rel dates-w sales-8-5-09.xls

Lamborghini 2009-2010FEguide-all rel dates-w sales-8-5-09.xls

Richard,

re: 2009 & 2010 FE Guide data for web posting - Please review & correct Verify data base if necessary

As you know we will be updating the www.fueleconomy.gov every week until the Cash-for-Clunkers program ends. Here's the latest spread sheet. Please double check and correct any errors in Verify. If you need help diagnosing the errors or need to delete any indexes, please call the EPA help line.

Regards

EPA com	VERIFY cc	Model Yr	Mfr Name	Division	Carline	Verify Mfr Index (Mo	Eng Displ # Cyl	
Diesel; Warning - if trans type is A	2010	Volkswage	Audi	A3	VWX	76	2.0	4
Warning - if trans type is A	2010	Volkswage	Audi	Q7	VWX	62	3.6	6
Warning - if trans type is A	2010	Volkswage	Volkswage	CC	VWX	71	3.6	6
Warning - if trans type is A	2010	Volkswage	Volkswage	CC 4MOTIV	VWX	72	3.6	6
Warning - if trans type is A	2010	Volkswage	Volkswage	EOS	VWX	68	2.0	4
Diesel;	2010	Volkswage	Volkswage	GOLF	VWX	79	2.0	4
Diesel; Warning - if trans type is A	2010	Volkswage	Volkswage	GOLF	VWX	75	2.0	4
Warning - if trans type is A	2010	Volkswage	Volkswage	GOLF	VWX	28	2.5	5
	2010	Volkswage	Volkswage	GOLF	VWX	31	2.5	5
Diesel;	2010	Volkswage	Volkswage	JETTA	VWX	77	2.0	4
Diesel; Warning - if trans type is A	2010	Volkswage	Volkswage	JETTA	VWX	74	2.0	4
Warning - if trans type is A	2010	Volkswage	Volkswage	JETTA	VWX	27	2.5	5
	2010	Volkswage	Volkswage	JETTA	VWX	30	2.5	5
Diesel;	2010	Volkswage	Volkswage	JETTA SP	VWX	78	2.0	4
Diesel; Warning - if trans type is A	2010	Volkswage	Volkswage	JETTA SP	VWX	73	2.0	4
Warning - if trans type is A	2010	Volkswage	Volkswage	JETTA SP	VWX	26	2.5	5
	2010	Volkswage	Volkswage	JETTA SP	VWX	29	2.5	5
	2010	Volkswage	Volkswage	NEW BEE	VWX	67	2.5	5
Warning - if trans type is A	2010	Volkswage	Volkswage	NEW BEE	VWX	65	2.5	5
Warning - if trans type is A	2010	Volkswage	Volkswage	NEW BEE	VWX	66	2.5	5
Warning - if trans type is A	2010	Volkswage	Volkswage	PASSAT	VWX	52	2.0	4
Warning - if trans type is A	2010	Volkswage	Volkswage	PASSAT	VWX	54	2.0	4
Warning - if trans type is A	2010	Volkswage	Volkswage	TOUAREC	VWX	61	3.6	6

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd Hw	Low'd Coi	City Unad	Hwy Unad	Comb Unad
Auto(S6)	30	42	34				38.8462	60.1	46.1981
Auto(S6)	14	20	16				17.745	27.3112	21.0653
Auto(S6)	18	27	21				21.2	35.1	25.7972
Auto(S6)	17	25	20				20.5	33.5	24.8373
Auto(S6)	22	29	25				28.0251	41.3156	32.7685
Manual(M6	30	41	34				38.7511	58.535	45.7021
Auto(S6)	30	42	34				38.8462	60.1	46.1981
Auto(A6)	23	30	26				27.2668	40.2409	31.8941
Manual(M6	22	30	25				25.18	39.6147	30.1185
Manual(M6	30	41	34				38.7511	58.535	45.7021
Auto(S6)	30	42	34				38.8462	60.1	46.1981
Auto(A6)	23	30	25				27.0008	40.0169	31.6305
Manual(M6	22	30	25				24.8525	39.5714	29.8486
Manual(M6	30	41	34				38.7511	58.535	45.7021
Auto(S6)	30	42	34				38.8462	60.1	46.1981
Auto(A6)	23	30	25				27.0008	40.0169	31.6305
Manual(M6	22	30	25				24.8525	39.5714	29.8486
Manual(M6	20	28	23				24.9892	39.3753	29.9061
Auto(S6)	20	29	23				25.1733	40.8	30.4155
Auto(S6)	20	28	23				24.8461	39.7267	29.8832
Auto(S6)	22	31	25				27.1189	42	32.2629
Auto(S6)	22	31	25				27.1189	42	32.2629
Auto(S6)	14	20	16				17.745	27.3112	21.0653

City	Model	Year	Fuel	Comb 5-C	Guzzler?	Air Aspir	Air Aspira	Trans	Trans Des	Trans, Otr	# Gears
						TC	Turbochar	SA	Semi-Automatic		6
						NA	Naturally	SA	Semi-Automatic		6
17.5	26.6	20.6843				NA	Naturally	SA	Semi-Automatic		6
16.9	25.2	19.8407				NA	Naturally	SA	Semi-Automatic		6
22.18	29.4583	24.9545				TC	Turbochar	SA	Semi-Automatic		6
						TC	Turbochar	M	Manual		6
						TC	Turbochar	SA	Semi-Automatic		6
22.9556	30.026	25.6764				NA	Naturally	AA	Automatic		6
21.7583	30.3987	24.9495				NA	Naturally	AM	Manual		5
						TC	Turbochar	M	Manual		6
						TC	Turbochar	SA	Semi-Automatic		6
22.69	29.757	25.4051				NA	Naturally	AA	Automatic		6
21.779	30.2556	24.9209				NA	Naturally	AM	Manual		5
						TC	Turbochar	M	Manual		6
						TC	Turbochar	SA	Semi-Automatic		6
22.69	29.757	25.4051				NA	Naturally	AA	Automatic		6
21.779	30.2556	24.9209				NA	Naturally	AM	Manual		5
						NA	Naturally	AM	Manual		5
						NA	Naturally	SA	Semi-Automatic		6
						NA	Naturally	SA	Semi-Automatic		6
21.9904	30.747	25.2229				TC	Turbochar	SA	Semi-Automatic		6
21.9904	30.747	25.2229				TC	Turbochar	SA	Semi-Automatic		6
						NA	Naturally	SA	Semi-Automatic		6

Trans	Loc	Trans	Cre	Drive	Sys	Drive	Des	Primary	B	Max	Ethar	Max	Biodi	Range	1 - IFuel	Usag	Fuel	Usag
N	N		F	2-Wheel	DAVWXV02.0U5N								5		DU		Diesel, ultr	
N	N		A	All Wheel	IAVWXT03.6U76										GP		Gasoline (I	
N	N		F	2-Wheel	DAVWXV03.6U46										GP		Gasoline (I	
N	N		A	All Wheel	IAVWXV03.6U46										GP		Gasoline (I	
N	N		F	2-Wheel	DAVWXV02.03UA										GP		Gasoline (I	
N	N		F	2-Wheel	DAVWXV02.0U5N								5		DU		Diesel, ultr	
N	N		F	2-Wheel	DAVWXV02.0U5N								5		DU		Diesel, ultr	
N	N		F	2-Wheel	DAVWXV02.5U35										G		Gasoline (I	
N	N		F	2-Wheel	DAVWXV02.5U35										G		Gasoline (I	
N	N		F	2-Wheel	DAVWXV02.0U5N								5		DU		Diesel, ultr	
N	N		F	2-Wheel	DAVWXV02.0U5N								5		DU		Diesel, ultr	
N	N		F	2-Wheel	DAVWXV02.5U35										G		Gasoline (I	
N	N		F	2-Wheel	DAVWXV02.5U35										G		Gasoline (I	
N	N		F	2-Wheel	DAVWXV02.0U5N								5		DU		Diesel, ultr	
N	N		F	2-Wheel	DAVWXV02.0U5N								5		DU		Diesel, ultr	
N	N		F	2-Wheel	DAVWXV02.5U35										G		Gasoline (I	
N	N		F	2-Wheel	DAVWXV02.5U35										G		Gasoline (I	
N	N		F	2-Wheel	DAVWXV02.5253										G		Gasoline (I	
N	N		F	2-Wheel	DAVWXV02.5253										G		Gasoline (I	
N	N		F	2-Wheel	DAVWXV02.5253										G		Gasoline (I	
N	N		F	2-Wheel	DAVWXV02.03UA										GP		Gasoline (I	
N	N		F	2-Wheel	DAVWXV02.03UA										GP		Gasoline (I	
N	N		A	All Wheel	IAVWXT03.6U76										GP		Gasoline (I	

Annual Fuel Economy (EPA)	Calculation	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Low'd City Low'd Hw Low'd Cor City2 Unadjusted)
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1191	1191	updated with 2010 units price of \$2.70 Diesel	
2625	2625updated 2010 fuel unit price of \$2.80	
1999	1999	..update to 2010 fuel unit price of \$2.80	
2100	2100	..update to 2010 fuel unit price of \$2.80	
1680	1680	this is a double clutch transmission and it has no torque converter with a lock-up.....updated w	
1191	1191	updated with 2010 fuel unit price of \$2.70 Diesel	
1191	1191	updated with 2010 units price of \$2.70 Diesel	
1502	1502	CORRECTED MODEL TYPE FE AND ANNUAL FUEL COST FOR THIS GOLF ..update to 2	
1560	1560	..update to 2010 fuel unit price of \$2.60	
1191	1191	updated with 2010 fuel unit price of \$2.70 Diesel	
1191	1191	updated with 2010 units price of \$2.70 Diesel	
1560	1560	..update to 2010 fuel unit price of \$2.60	
1560	1560	..update to 2010 fuel unit price of \$2.60	
1191	1191	updated with 2010 fuel unit price of \$2.70 Diesel	
1191	1191	updated with 2010 units price of \$2.70 Diesel	
1560	1560	..update to 2010 fuel unit price of \$2.60	
1560	1560	..update to 2010 fuel unit price of \$2.60	
1696	1696	updated with 2010 fuel unit price of \$2.60	
1696	1696	updated with 2010 unit price for regular at \$2.60	
1696	1696	updated with 2010 fuel unit price of \$2.60	
1680	1680	CORRECTED DATA SUB TO NO SUB FOR ALL TESTS,updated with 2010 unit fuel price	
1680	1680updated with 2010 unit fuel price of \$2.80	
2625	2625updated 2010 fuel unit price of \$2.80	

[illegible]

ith 2010 unit price of \$2.80

010 fuel unit price of \$2.60

e of \$2.80

Alternative Fuel	Engine Displacement	Intake Valve	Exhaust Valve	Carline	CI	Carline	CI	Car/Truck	Calc	Appr	Sales
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(b) (4)

2	2	7	Small Staticar	Derived 5-i							
2	2	23	Special Pu	1 Derived 5-i							
2	2	4	Compact Ccar	Vehicle Sp							
2	2	4	Compact Ccar	Vehicle Sp							
2	2	3	Subcompacar	Vehicle Sp							
2	2	4	Compact Ccar	Derived 5-i							
2	2	4	Compact Ccar	Derived 5-i							
2	2	4	Compact Ccar	Vehicle Sp							
2	2	4	Compact Ccar	Vehicle Sp							
2	2	4	Compact Ccar	Derived 5-i							
2	2	4	Compact Ccar	Derived 5-i							
2	2	4	Compact Ccar	Vehicle Sp							
2	2	4	Compact Ccar	Vehicle Sp							
2	2	7	Small Staticar	Derived 5-i							
2	2	7	Small Staticar	Derived 5-i							
2	2	7	Small Staticar	Vehicle Sp							
2	2	7	Small Staticar	Vehicle Sp							
2	2	3	Subcompacar	Derived 5-i							
2	2	3	Subcompacar	Derived 5-i							
2	2	2	Minicompacar	Derived 5-i							
2	2	5	Midsize Ccar	Vehicle Sp							
2	2	8	Midsize Stcar	Vehicle Sp							
2	2	23	Special Pu	1 Derived 5-i							

Release DEPA FE L:Mfr Conta Contact E Contact Phone

7/22/2009	1896	RICHARD	Richard.Tr	248 754 4213
7/22/2009	1933	RICHARD	Richard.Tr	248 754 4213
7/22/2009	1926	RICHARD	Richard.Tr	248 754 4213
7/22/2009	1927	RICHARD	Richard.Tr	248 754 4213
7/22/2009	1906	RICHARD	Richard.Tr	248 754 4213
7/22/2009	1902	RICHARD	Richard.Tr	248 754 4213
7/22/2009	1897	RICHARD	Richard.Tr	248 754 4213
7/18/2009	1922	RICHARD	Richard.Tr	248 754 4213
7/18/2009	1925	RICHARD	Richard.Tr	248 754 4213
7/22/2009	1900	RICHARD	Richard.Tr	248 754 4213
7/22/2009	1898	RICHARD	Richard.Tr	248 754 4213
7/18/2009	1921	RICHARD	Richard.Tr	248 754 4213
7/18/2009	1924	RICHARD	Richard.Tr	248 754 4213
7/22/2009	1901	RICHARD	Richard.Tr	248 754 4213
7/22/2009	1899	RICHARD	Richard.Tr	248 754 4213
7/18/2009	1920	RICHARD	Richard.Tr	248 754 4213
7/18/2009	1923	RICHARD	Richard.Tr	248 754 4213
7/22/2009	1918	RICHARD	Richard.Tr	248 754 4213
7/22/2009	1917	RICHARD	Richard.Tr	248 754 4213
7/22/2009	1919	RICHARD	Richard.Tr	248 754 4213
7/12/2009	1903	RICHARD	Richard.Tr	248 754 4213
7/12/2009	1904	RICHARD	Richard.Tr	248 754 4213
7/22/2009	1932	RICHARD	Richard.Tr	248 754 4213

EPA comn	VERIFY cc	Model Yr	Mfr Name	Division	Carline	Verify Mfr Index (Mo	Eng Displ #	Cyl
		2009	Audi	Audi	A6 QUATT	ADX	42	3.0 6
		2009	Audi	Audi	A6 AVANT	ADX	43	3.0 6
		2009	Audi	Audi	Q5	ADX	44	3.2 6
Diesel;		2009	Audi	Audi	Q7	ADX	46	3.0 6
Diesel;		2009	Audi	Volkswage	TOUAREG	ADX	47	3.0 6
Annual fue	Y	2010	Audi	Audi	A3	ADX	46	2.0 4
Warning - i	Y	2010	Audi	Audi	A3	ADX	47	2.0 4
Warning - if trans type is	Audi	2010	Audi	Audi	A3 QUATT	ADX	43	2.0 4
		2010	Audi	Audi	A4	ADX	18	2.0 4
		2010	Audi	Audi	A4 AVANT	ADX	20	2.0 4
		2010	Audi	Audi	A4 QUATT	ADX	24	2.0 4
		2010	Audi	Audi	A4 QUATT	ADX	21	2.0 4
		2010	Audi	Audi	A5 Cabriol	ADX	19	2.0 4
		2010	Audi	Audi	A5 Cabriol	ADX	23	2.0 4
		2010	Audi	Audi	A5 QUATT	ADX	25	2.0 4
		2010	Audi	Audi	A5 QUATT	ADX	22	2.0 4
Warning - if trans type is	Audi	2010	Audi	Audi	A5 QUATT	ADX	60	3.2 6
		2010	Audi	Audi	A6 AVANT	ADX	35	3.0 6
		2010	Audi	Audi	A6 QUATT	ADX	34	3.0 6
		2010	Audi	Audi	A6 QUATT	ADX	8	4.2 8
		2010	Audi	Audi	A8	ADX	7	4.2 8
		2010	Audi	Audi	A8 L	ADX	6	4.2 8
Warning - if trans type is	Audi	2010	Audi	Audi	Q5	ADX	48	3.2 6
Diesel; Warning - if trans type is	Audi	2010	Audi	Audi	Q7	ADX	63	3.0 6
		2010	Audi	Audi	Q7	ADX	11	4.2 8
		2010	Audi	Audi	R8	ADX	33	4.2 8
		2010	Audi	Audi	R8	ADX	32	4.2 8
Warning - if trans type is	Audi	2010	Audi	Audi	R8	ADX	16	5.2 10
		2010	Audi	Audi	R8	ADX	17	5.2 10
		2010	Audi	Audi	S4	ADX	36	3.0 6
Warning - if trans type is	Audi	2010	Audi	Audi	S4	ADX	37	3.0 6
		2010	Audi	Audi	S5	ADX	10	4.2 8
		2010	Audi	Audi	S5	ADX	9	4.2 8
Warning - if trans type is	Audi	2010	Audi	Audi	S5 Cabriol	ADX	38	3.0 6
Warning - if trans type is	Audi	2010	Audi	Audi	S6	ADX	42	5.2 10
Warning - if trans type is	Audi	2010	Audi	Audi	TT COUPE	ADX	44	2.0 4
Warning - if trans type is	Audi	2010	Audi	Audi	TT ROAD	ADX	45	2.0 4
		2010	Audi	Lamborghini	Gallardo	CADX	12	5.2 10
		2010	Audi	Lamborghini	Gallardo	CADX	14	5.2 10
Warning - if trans type is	Audi	2010	Audi	Lamborghini	Gallardo	SADX	13	5.2 10
		2010	Audi	Lamborghini	Gallardo	SADX	15	5.2 10
		2010	Audi	Volkswage	EOS	ADX	57	2.0 4
		2010	Audi	Volkswage	GTI	ADX	56	2.0 4
Warning - if trans type is	Audi	2010	Audi	Volkswage	GTI	ADX	70	2.0 4
		2010	Audi	Volkswage	JETTA	ADX	55	2.0 4
Warning - if trans type is	Audi	2010	Audi	Volkswage	JETTA	ADX	69	2.0 4
		2010	Audi	Volkswage	PASSAT	CADX	58	2.0 4
Warning - if trans type is	Audi	2010	Audi	Volkswage	PASSAT	CADX	53	2.0 4
		2010	Audi	Volkswage	TIGUAN	ADX	51	2.0 4
Warning - if trans type is	Audi	2010	Audi	Volkswage	TIGUAN	ADX	50	2.0 4
Warning - if trans type is	Audi	2010	Audi	Volkswage	TIGUAN 4	ADX	49	2.0 4
Diesel; Warning - if trans type is	Audi	2010	Audi	Volkswage	Touareg	ADX	64	3.0 6

Trans as	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd Hw	Low'd Cor	City Unad	Hwy Unad	Comb Un
Auto(S6)	18	26	21				21.8	34.8	26.2052
Auto(S6)	18	26	21				21.8	34.8	26.2052
Auto(S6)	18	23	20				22.7	30.7	25.7155
Auto(S6)	17	25	20				19.8	33.2	24.1943
Auto(S6)	17	25	20				21.9	34.4	26.1811
Manual(S6)	22	30	25				27.6402	42.575	32.8212
Auto(S6)	21	27	23				25.9563	37.7989	30.2164
Auto(S6)	18	27	21				22.6	36.2	27.1981
Auto(S6)	18	26	21				21.7553	34.7286	26.1514
Auto(S6)	18	26	21				21.7553	34.7286	26.1514
Auto(S6)	16	23	18				19.8911	31.5002	23.8458
Auto(S6)	16	23	18				19.8911	31.5002	23.8458
Auto(S6)	16	23	18				19.8911	31.5002	23.8458
Auto(S6)	18	23	20				22.7	30.7	25.7155
Auto(S6)	17	25	20				19.8	33.2	24.1943
Auto(S6)	13	18	15				16.2	24.6	19.1412
Manual(M6)	12	19	15				15.3	26.8	18.9614
Auto(S6)	13	18	15				15.4	25.0451	18.6283
Auto(AM6)	13	20	16				15.8	24.8	18.8839
Manual(M6)	12	20	15				13.7	23.9	16.9565
Manual(M6)	18	27	21				21.5	34.1	25.7879
Auto(S7)	18	28	21				21.6	35	26.096
Manual(M6)	14	22	17				17.3	29.3	21.2088
Auto(S6)	16	24	19				20.4	31	24.1098
Auto(S7)	17	26	20				20.3	34	24.7961
Auto(S6)	14	19	16				17.2	26.7	20.4789
Auto(S6)	21	29	24				27.5267	39.7256	31.9404
Auto(S6)	21	29	24				27.5267	39.7256	31.9404
Auto(AM6)	14	20	16				16.1	25.4	19.276
Manual(M6)	12	20	15				14	24	17.2308
Auto(AM6)	13	20	16				16	25.4	19.197
Manual(M6)	12	20	14				13	22.6	16.0722
Manual(M6)	21	31	25				26.0803	41.521	31.3218
Manual(M6)	21	31	25				26.0803	41.521	31.3218
Auto(S6)	24	32	27				29.8294	43.5414	34.7546
Manual(M6)	21	31	25				26.0803	41.521	31.3218
Auto(S6)	24	32	27				29.8294	43.5414	34.7546
Manual(M6)	21	31	25				26.0803	41.521	31.3218
Auto(S6)	22	31	25				27.1189	42	32.2629
Manual(M6)	19	26	21				23.3	36.2	27.75
Auto(S6)	18	24	21				22.9	34.1	26.8716
Auto(S6)	18	24	20				22.5	33.3	26.3449
Auto(S6)	18	25	20				21.9	34.4	26.1811

Manual(S6) 09-16; Please revise Verify; 24
Auto(S6) Please update Verify. 25 labels (window stickers) must use new fuel costs 27.0478 Aug 24, 2009, 34.7364 09-1

City	Year	Model	Comb 5-C	Guzzler?	Air Aspir	Air Aspir	Trans	Trans Des	Trans, Ott	# Gears
17.6	25.9	20.5658			SC	Superchar	SA	Semi-Automatic		6
17.6	25.9	20.5658			SC	Superchar	SA	Semi-Automatic		6
17.8	22.9	19.7826			NA	Naturally	ASA	Semi-Automatic		6
16.6	24.8	19.5017			TC	Turbochar	SA	Semi-Automatic		6
					TC	Turbochar	SA	Semi-Automatic		6
20.7906	30	24.123			TC	Turbochar	M	Manual		6
6; Please revise	27.715	23.9585			TC	Turbochar	SA	Semi-Automatic		6
20.9	28.1	23.6239			TC	Turbochar	SA	Semi-Automatic		6
					TC	Turbochar	CVT	Continuously Variable		1
					TC	Turbochar	SA	Semi-Automatic		6
					TC	Turbochar	M	Manual		6
					TC	Turbochar	SA	Semi-Automatic		6
					TC	Turbochar	CVT	Continuously Variable		1
					TC	Turbochar	SA	Semi-Automatic		6
					TC	Turbochar	M	Manual		6
					TC	Turbochar	SA	Semi-Automatic		6
18.2	27.2	21.384			NA	Naturally	ASA	Semi-Automatic		6
17.6	25.9	20.6407			SC	Superchar	SA	Semi-Automatic		6
17.6	25.9	20.6407			SC	Superchar	SA	Semi-Automatic		6
					NA	Naturally	ASA	Semi-Automatic		6
					NA	Naturally	ASA	Semi-Automatic		6
					NA	Naturally	ASA	Semi-Automatic		6
17.8	22.9	19.7826			NA	Naturally	ASA	Semi-Automatic		6
16.6	24.8	19.5017			TC	Turbochar	SA	Semi-Automatic		6
					NA	Naturally	ASA	Semi-Automatic		6
			G		NA	Naturally	AM	Manual		6
			G		NA	Naturally	ASA	Semi-Automatic		6
13.3	19.5	15.5206	G		NA	Naturally	AAM	Automated Manual		6
11.9	19.9	14.5282	G		NA	Naturally	AM	Manual		6
17.8	26.7	20.9412			SC	Superchar	M	Manual		6
17.7	27.8	21.1593			SC	Superchar	SA	Semi-Automatic		7
14.3	21.9	16.9464	G		NA	Naturally	AM	Manual		6
16.5	24.2	19.2573			NA	Naturally	ASA	Semi-Automatic		6
16.7	26.1	19.93			SC	Superchar	SA	Semi-Automatic		7
			G		NA	Naturally	ASA	Semi-Automatic		6
21.2766	29.052	24.1899			TC	Turbochar	SA	Semi-Automatic		6
21.2766	29.052	24.1899			TC	Turbochar	SA	Semi-Automatic		6
13.5	19.8	15.756	G		NA	Naturally	AAM	Automated Manual		6
12.1	20	14.7157	G		NA	Naturally	AM	Manual		6
13.4	19.8	15.6809	G		NA	Naturally	AAM	Automated Manual		6
11.5	19.5	14.1038	G		NA	Naturally	AM	Manual		6
21.101	30.8701	24.6049			TC	Turbochar	M	Manual		6
21.101	30.8701	24.6049			TC	Turbochar	M	Manual		6
24.0933	32.4086	27.2382			TC	Turbochar	SA	Semi-Automatic		6
21.101	30.8701	24.6049			TC	Turbochar	M	Manual		6
24.0933	32.4086	27.2382			TC	Turbochar	SA	Semi-Automatic		6
21.101	30.8701	24.6049			TC	Turbochar	M	Manual		6
21.9904	30.747	25.2229			TC	Turbochar	SA	Semi-Automatic		6
					TC	Turbochar	M	Manual		6
					TC	Turbochar	SA	Semi-Automatic		6
					TC	Turbochar	SA	Semi-Automatic		6
17.8	24.6	20.3287			TC	Turbochar	SA	Semi-Automatic		6

Trans Loc	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - I	Fuel Usag	Fuel Usag
Y	N	A	All Wheel I9AD XV03.03UF					GP	Gasoline (l
Y	N	A	All Wheel I9AD XV03.03UF					GP	Gasoline (l
Y	N	A	All Wheel I9AD XT03.23UC					GP	Gasoline (l
Y	N	A	All Wheel I9AD XT03.03LD			5		D	Diesel, low
Y	N	A	All Wheel I9AD XT03.03LD			5		D	Diesel, low
N	N	F	2-Wheel DAAD XV02.03UA					GP	Gasoline (l
N	N	F	2-Wheel DAAD XV02.03UA					GP	Gasoline (l
N	N	A	All Wheel IAAD XV02.03UA					GP	Gasoline (l
N	N	F	2-Wheel DAAD XV02.03UB					GP	Gasoline (l
Y	N	A	All Wheel IAAD XV02.03UB					GP	Gasoline (l
Y	N	A	All Wheel IAAD XV02.03UB					GP	Gasoline (l
Y	N	A	All Wheel IAAD XV02.03UB					GP	Gasoline (l
N	N	F	2-Wheel DAAD XV02.03UB					GP	Gasoline (l
Y	N	A	All Wheel IAAD XV02.03UB					GP	Gasoline (l
Y	N	A	All Wheel IAAD XV02.03UB					GP	Gasoline (l
Y	N	A	All Wheel IAAD XV02.03UB					GP	Gasoline (l
N	N	A	All Wheel IAAD XJ03.23UC					GP	Gasoline (l
Y	N	A	All Wheel IAAD XV03.03UF					GP	Gasoline (l
Y	N	A	All Wheel IAAD XV03.03UF					GP	Gasoline (l
Y	N	A	All Wheel IAAD XV04.2365					GP	Gasoline (l
Y	N	A	All Wheel IAAD XV04.2365					GP	Gasoline (l
Y	N	A	All Wheel IAAD XV04.2365					GP	Gasoline (l
N	N	A	All Wheel IAAD XJ03.23UC					GP	Gasoline (l
N	N	A	All Wheel IAAD XT03.03LD			5		DU	Diesel, ultr
Y	N	A	All Wheel IAAD XT04.23UD					GP	Gasoline (l
Y	N	A	All Wheel IAAD XV04.2375					GP	Gasoline (l
Y	N	A	All Wheel IAAD XV04.2375					GP	Gasoline (l
N	N	A	All Wheel IAAD XV05.2LR8					GP	Gasoline (l
N	N	A	All Wheel IAAD XV05.2LR8					GP	Gasoline (l
N	N	A	All Wheel IAAD XV03.03UF					GP	Gasoline (l
N	N	A	All Wheel IAAD XV03.03UF					GP	Gasoline (l
N	N	A	All Wheel IAAD XV04.2365					GP	Gasoline (l
Y	N	A	All Wheel IAAD XV04.2365					GP	Gasoline (l
N	N	A	All Wheel IAAD XV03.03UF					GP	Gasoline (l
N	N	A	All Wheel IAAD XV05.2385					GP	Gasoline (l
N	N	A	All Wheel IAAD XV02.03UA					GP	Gasoline (l
N	N	A	All Wheel IAAD XV02.03UA					GP	Gasoline (l
Y	N	A	All Wheel IAAD XV05.2LR8					GP	Gasoline (l
N	N	A	All Wheel IAAD XV05.2LR8					GP	Gasoline (l
N	N	A	All Wheel IAAD XV05.2LR8					GP	Gasoline (l
N	N	A	All Wheel IAAD XV05.2LR8					GP	Gasoline (l
N	N	F	2-Wheel DAVWXV02.03UA					GP	Gasoline (l
N	N	F	2-Wheel DAAD XV02.03UA					GP	Gasoline (l
N	N	F	2-Wheel DAAD XV02.03UA					GP	Gasoline (l
N	N	F	2-Wheel DAAD XV02.03UA					GP	Gasoline (l
N	N	F	2-Wheel DAAD XV02.03UA					GP	Gasoline (l
N	N	F	2-Wheel DAAD XV02.03UA					GP	Gasoline (l
N	N	F	2-Wheel DAAD XV02.03UA					GP	Gasoline (l
N	N	F	2-Wheel DAAD XV02.03UA					GP	Gasoline (l
N	N	F	2-Wheel DAAD XV02.03UA					GP	Gasoline (l
N	N	A	All Wheel IAAD XV02.03UA					GP	Gasoline (l
N	N	A	All Wheel IAAD XT03.03LD			5		DU	Diesel, ultr

5004	Additional Office	Gas Guzzl	Gas Guzzl	2Dr Pass	2Dr Lugg	4Dr Pass	4Dr Lugg	Htchbk Pa	Htchbk Lu
MPG	leaded (Recommended)	Not exempt				98	16		
MPG	leaded (Recommended)	Not exempt				99	34		
MPG	leaded (Recommended)	Truck							
M500	ppm miles per cT	Truck							
M500	ppm miles per cT	Truck							
MPG	leaded (Recommended)	Not exempt				89	20		
MPG	leaded (Recommended)	Not exempt				89	20		
MPG	leaded (Recommended)	Not exempt				89	20		
MPG	leaded (Recommended)	Not exempt				91	12		
MPG	leaded (Recommended)	Not exempt				90	28		
MPG	leaded (Recommended)	Not exempt				91	12		
MPG	leaded (Recommended)	Not exempt				91	12		
MPG	leaded (Recommended)	Not exemp	81	10					
MPG	leaded (Recommended)	Not exemp	81	10					
MPG	leaded (Recommended)	Not exemp	84	12					
MPG	leaded (Recommended)	Not exemp	84	12					
MPG	leaded (Recommended)	Not exemp	84	12					
MPG	leaded (Recommended)	Not exempt				99	34		
MPG	leaded (Recommended)	Not exempt				98	16		
MPG	leaded (Recommended)	Not exempt				98	16		
MPG	leaded (Recommended)	Not exempt				100	15		
MPG	leaded (Recommended)	Not exempt				107	15		
MPG	leaded (Recommended)	Truck							
MPG	(15 ppm) maximum	Truck							
MPG	leaded (Recommended)	Truck							
MPG	leaded (Recommended)	Not exempt							
MPG	leaded (Recommended)	Not exempt							
MPG	leaded (Recommended)	Not exempt							
MPG	leaded (Recommended)	Not exempt							
MPG	leaded (Recommended)	Not exempt				90	13		
MPG	leaded (Recommended)	Not exempt				90	13		
MPG	leaded (Recommended)	Not exemp	84	12					
MPG	leaded (Recommended)	Not exemp	84	12					
MPG	leaded (Recommended)	Not exemp	81	10					
MPG	leaded (Recommended)	Not exempt				98	16		
MPG	leaded (Recommended)	Not exempt						74	13
MPG	leaded (Recommended)	Not exempt							
MPG	leaded (Recommended)	Not exempt							
MPG	leaded (Recommended)	Not exempt							
MPG	leaded (Recommended)	Not exempt							
MPG	leaded (Recommended)	Not exemp	77	11					
MPG	leaded (Recommended)	Not exempt						94	15
MPG	leaded (Recommended)	Not exempt						94	15
MPG	leaded (Recommended)	Not exempt				91	16		
MPG	leaded (Recommended)	Not exempt				91	16		
MPG	leaded (Recommended)	Not exempt				94	13		
MPG	leaded (Recommended)	Not exempt				94	13		
MPG	leaded (Recommended)	Truck							
MPG	leaded (Recommended)	Truck							
MPG	leaded (Recommended)	Truck							
MPG	(15 ppm) maximum	Truck							

Annual Fuel	EPA Calc	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Low'd City Low'd Hw Low'd City2 Unadjusted
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1499	1499	corrected annual fuel cost to reflect new unit price issued by EPA in March	
1499	1499	corrected annual fuel cost to reflect new unit price issued by EPA in March 2009	
1575	1575	correction to annual fuel cost from new unit price issued by EPA March 2009, and gas guzzler	
1688	1688	corrected gas guzzler exempt statement to Truck and corrected fuel to Diesel and the annua	
1688	1688	corrected annual fuel cost and gas guzzler exempt category, then added this statement	
1314	1751		
1314	1751		
1751	1751	corrected number of forward gears to 6...updated with 2010 unit price of \$2.80	
1617	1617	updated to 2010 unit price of \$2.80	
1827	1827	update with 2010 unit price of \$2.80	
1680	1680	update with 2010 unit price of \$2.80	
1827	1827	update with 2010 unit price of \$2.80	
1617	1617	updated to 2010 unit price of \$2.80	
1827	1827	update with 2010 unit price of \$2.80	
1680	1680	update with 2010 unit price of \$2.80	
1827	1827	update with 2010 unit price of \$2.80	
1999	1999	updated with 2010 unit price of \$2.80	
1999	1999	updated with 2010 unit price of \$2.80	
1999	1999	updated with 2010 unit price of \$2.80	
2335	2335	updated with 2010 fuel price of \$2.80	
2335	2335	updated with 2010 fuel price of \$2.80	
2335	2335	updated with 2010 fuel price of \$2.80	
2100	2100	Corrected number of forward gears to 6 from 1.....updated with 2010 fuel unit price of \$2.8	
2025	2025	updated with 2010 unit fuel price of \$2.70 Diesel	
2801	2801	updated with 2010 unit price of \$2.80	
2801	2801	updated to 2010 unit price of \$2.80	
2801	2801	updated with 2010 unit price of \$2.80	
2625	2625	SC03 and Cold CO tests are from Audi R8 configuration 0 of veh 9LR8-RAQ used in Lambor	
2801	2801	SC03 and Cold CO tests are from Audi R8 configuration 0 of veh 9LR8-RMQ used in Lambor	
1999	1999	updated with 2010 unit price of \$2.80	
1999	1999	Corrected trans code to S7 updated with 2010 unit price of \$2.80	
2470	2470	updated with 2010 unit price of \$2.80	
2209	2209	updated with 2010 unit price of \$2.80	
2100	2100	updated with 2010 unit price of \$2.80	
2625	2625	update with 2010 unit price of \$2.80	
1751	1751	corrected number of forward gears to 6...updated with 2010 unit price of \$2.80	
1751	1751	corrected the number of forward gears to 6...updated with 2010 unit price of \$2.80	
2625	2625	SC03 and Cold CO tests are originally from worse case Audi R8 configuration 0 of veh 9LR8	
2801	2801	SC03 and Cold CO tests are from Audi R8 worse case configuration 0 of veh 9LR8-RMQ. up	
2625	2625	SC03 and Cold CO tests are from Audi R8 worse case configuration 0 of veh 9LR8-RAQ. cor	
2999	2999	SC03 and Cold CO tests are from Audi R8 worse case configuration 0 of veh 9LR8-RMQ. Co	
1680	1680	added manuf confirmatory tests for Eos 2.0SA test group.....updated with 2010 unit fuel pric	
1680	1680	added manuf confirmatory tests for SULEV Eos.....updated with 2010 unit fuel price of \$2.80	
1554	1554	this is a double clutch transmission and it has no hydrolic torque converter with a lock-up...up	
1680	1680	corrected manuf code, the manuf confirmatory tests for the Eos in the2.03SA test group w	
1554	1554	this is a double clutch transmission and it has no hydrolic torque converter with a lock-up...up	
1680	1680	mauf confirmatory tests added for Eos ...2.0SA test group.....updated with 2010 unit fuel pric	
1680	1680	CORRECTED SALES VOLUME FOR THIS CC MODEL, SECOND CORRECTION TO LIST T	
1999	1999	corrected to use derived 5-cycle method for label.....updated 2010 fuel unit price of \$2.80	
1999	1999	corrected to use derived 5-cycle label method.....updated 2010 fuel unit price of \$2.80	
2100	2100	changed to derived 5 cycle label calculation.....updated 2010 fuel unit price of \$2.80	
2025	2025	updated with 2010 unit fuel price of \$2.70 Diesel	

MSRP, Fuel Type, Fuel Economy, Fuel Combustion, Fuel Range, Fuel Usage, Fuel Unit, Fuel Unit

exempt to truck, plus US06 and SC03 test numbers corrected
Fuel cost based upon new unit price issued by EPA in March 2009

0

ghini 5 cycle labels. Transmission lock-up corrected to "no". corrected to automated manual trans, updated with 2
ghini 5 cycle labels.updated with 2010 fuel unit price of \$2.80

-RAQ. corrected to automated manual trans, updated with 2010 unit price of \$2.80
dated with 2010 unit price of \$2.80
corrected ETW and IW to 4000lbs corrected to automated manual trans, updated with 2010 unit price of \$2.80
corrected annual fuel cost, updated with 2010 unit price of \$2.80
e of \$2.80

date with 2010 fuel unit price of \$2.80
ere addedupdated with 2010 unit fuel price of \$2.80
date with 2010 fuel unit price of \$2.80
e of \$2.80
HE CC CARLINE CODE AS 293 NOT 291 AT DATA LEVELupdated with 2010 unit fuel price of \$2.80

Model	Year	Fuel	Engine	Displacement	Intake	Val	Exhaust	V	Carline	CI	Carline	CI	Car/Truck	Calc	Appr	Sales
				2			2		5	Midsize C			car	Vehicle	Sp	(b) (4)
				2			2		8	Midsize St			car	Vehicle	Sp	
				2			2		23	Special Pu			1	Vehicle	Sp	
				2			2		23	Special Pu			1	Vehicle	Sp	
				2			2		23	Special Pu			1	Derived 5-		
				2			2		7	Small Static			car	Vehicle	Sp	
				2			2		7	Small Static			car	Vehicle	Sp	
				2			2		7	Small Static			car	Vehicle	Sp	
				2			2		4	Compact C			car	Derived 5-		
				2			2		7	Small Static			car	Derived 5-		
				2			2		4	Compact C			car	Derived 5-		
				2			2		4	Compact C			car	Derived 5-		
				2			2		3	Subcompacar				Derived 5-		
				2			2		3	Subcompacar				Derived 5-		
				2			2		3	Subcompacar				Derived 5-		
				2			2		3	Subcompacar				Derived 5-		
				2			2		3	Subcompacar				Vehicle	Sp	
				2			2		8	Midsize St			car	Vehicle	Sp	
				2			2		5	Midsize C			car	Vehicle	Sp	
				2			2		5	Midsize C			car	Derived 5-		
				2			2		5	Midsize C			car	Derived 5-		
				2			2		6	Large Cars			car	Derived 5-		
				2			2		23	Special Pu			1	Vehicle	Sp	
				2			2		23	Special Pu			1	Vehicle	Sp	
				2			2		23	Special Pu			1	Derived 5-		
				2			2		1	Two Seate			car	Derived 5-		
				2			2		1	Two Seate			car	Derived 5-		
010 fuel unit price of \$2.80				2			2		1	Two Seate			car	Vehicle	Sp	
				2			2		1	Two Seate			car	Vehicle	Sp	
				2			2		4	Compact C			car	Vehicle	Sp	
				2			2		4	Compact C			car	Vehicle	Sp	
				2			2		3	Subcompacar				Vehicle	Sp	
				2			2		3	Subcompacar				Vehicle	Sp	
				2			2		3	Subcompacar				Vehicle	Sp	
				2			2		5	Midsize C			car	Derived 5-		
				2			2		3	Subcompacar				Vehicle	Sp	
				2			2		1	Two Seate			car	Vehicle	Sp	
				2			2		1	Two Seate			car	Vehicle	Sp	
				2			2		1	Two Seate			car	Vehicle	Sp	
				2			2		1	Two Seate			car	Vehicle	Sp	
				2			2		1	Two Seate			car	Vehicle	Sp	
				2			2		1	Two Seate			car	Vehicle	Sp	
				2			2		3	Subcompacar				Vehicle	Sp	
				2			2		4	Compact C			car	Vehicle	Sp	
				2			2		4	Compact C			car	Vehicle	Sp	
				2			2		4	Compact C			car	Vehicle	Sp	
				2			2		4	Compact C			car	Vehicle	Sp	
				2			2		4	Compact C			car	Vehicle	Sp	
				2			2		4	Compact C			car	Vehicle	Sp	
				2			2		22	Special Pu			1	Derived 5-		
				2			2		22	Special Pu			1	Derived 5-		
				2			2		23	Special Pu			1	Derived 5-		
				2			2		23	Special Pu			1	Vehicle	Sp	

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5/19/2009	828	RICHARD Richard.Tr	248 754 4213
5/19/2009	830	RICHARD Richard.Tr	248 754 4213
5/19/2009	835	RICHARD Richard.Tr	248 754 4213
5/19/2009	831	RICHARD Richard.Tr	248 754 4213
5/19/2009	832	RICHARD Richard.Tr	248 754 4213
5/12/2009	1165	RICHARD Richard.Tr	248 754 4213
5/12/2009	1166	RICHARD Richard.Tr	248 754 4213
6/5/2009	1892	RICHARD Richard.Tr	248 754 4213
6/3/2009	1868	RICHARD Richard.Tr	248 754 4213
6/3/2009	1870	RICHARD Richard.Tr	248 754 4213
6/3/2009	1874	RICHARD Richard.Tr	248 754 4213
6/3/2009	1871	RICHARD Richard.Tr	248 754 4213
6/3/2009	1869	RICHARD Richard.Tr	248 754 4213
6/3/2009	1873	RICHARD Richard.Tr	248 754 4213
6/3/2009	1876	RICHARD Richard.Tr	248 754 4213
6/3/2009	1872	RICHARD Richard.Tr	248 754 4213
6/22/2009	1895	RICHARD Richard.Tr	248 754 4213
6/3/2009	1888	RICHARD Richard.Tr	248 754 4213
6/3/2009	1887	RICHARD Richard.Tr	248 754 4213
5/29/2009	1859	RICHARD Richard.Tr	248 754 4213
5/29/2009	1858	RICHARD Richard.Tr	248 754 4213
5/29/2009	1857	RICHARD Richard.Tr	248 754 4213
6/11/2009	1965	RICHARD Richard.Tr	248 754 4213
6/22/2009	1966	RICHARD Richard.Tr	248 754 4213
5/29/2009	1863	RICHARD Richard.Tr	248 754 4213
6/2/2009	1886	RICHARD Richard.Tr	248 754 4213
6/2/2009	1885	RICHARD Richard.Tr	248 754 4213
6/25/2009	1866	RICHARD Richard.Tr	248 754 4213
6/25/2009	1867	RICHARD Richard.Tr	248 754 4213
6/3/2009	1889	RICHARD Richard.Tr	248 754 4213
6/3/2009	1890	RICHARD Richard.Tr	248 754 4213
6/29/2009	1862	RICHARD Richard.Tr	248 754 4213
6/29/2009	1861	RICHARD Richard.Tr	248 754 4213
6/3/2009	1891	RICHARD Richard.Tr	248 754 4213
6/10/2009	1875	RICHARD Richard.Tr	248 754 4213
6/5/2009	1893	RICHARD Richard.Tr	248 754 4213
6/5/2009	1894	RICHARD Richard.Tr	248 754 4213
6/25/2009	1850	RICHARD Richard.Tr	248 754 4213
6/25/2009	1852	RICHARD Richard.Tr	248 754 4213
6/25/2009	1851	RICHARD Richard.Tr	248 754 4213
6/25/2009	1853	RICHARD Richard.Tr	248 754 4213
6/18/2009	1915	RICHARD Richard.Tr	248 754 4213
6/18/2009	1914	RICHARD Richard.Tr	248 754 4213
6/22/2009	1909	RICHARD Richard.Tr	248 754 4213
6/18/2009	1913	RICHARD Richard.Tr	248 754 4213
6/22/2009	1908	RICHARD Richard.Tr	248 754 4213
6/18/2009	1916	RICHARD Richard.Tr	248 754 4213
6/12/2009	1905	RICHARD Richard.Tr	248 754 4213
6/12/2009	1931	RICHARD Richard.Tr	248 754 4213
6/12/2009	1930	RICHARD Richard.Tr	248 754 4213
6/12/2009	1929	RICHARD Richard.Tr	248 754 4213
6/22/2009	1967	RICHARD Richard.Tr	248 754 4213

EPA.com	VERIFY	cc	Model Yr	Mfr Name	Division	Carline	Verify Mfr Index (Mo	Eng Displ	# Cyl
			2010	Bentley	Bentley Mc	Continental	BEX	40	6.0 12
			2010	Bentley	Bentley Mc	Continental	BEX	41	6.0 12
			2010	Bentley	Bentley Mc	Continental	BEX	39	6.0 12
Warning - if trans type is Automatic			2010	Bentley	Bentley Mc	Continental	BEX	80	6.0 12

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd Hw	Low'd Coi	City Unad	Hwy Unad	Comb Unad
Auto(S6)	10	17	12				12.5281	23.2715	15.8132
Auto(S6)	10	17	13				12.8	23.8	16.1613
Auto(S6)	10	17	12				12.5281	23.2715	15.8132
Auto(S6)	12	19	14				14.4	24.4	17.6563

Cylinders	Displacement (L)	Fuel Type	Combustion	5-Speed Manual	Guzzler?	Air Intake	Aspiration	Transmission	Trans Description	Other	# Gears
					G	TC	Turbocharged	SA	Semi-Automatic		6
					G	TC	Turbocharged	SA	Semi-Automatic		6
					G	TC	Turbocharged	SA	Semi-Automatic		6
12	18.6	14.28	02	G	TC	Turbocharged	SA	Semi-Automatic			6

Trans Loc	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - I	Fuel Usag	Fuel Usag
Y	N	A	All Wheel IABEXV06.0501					GP	Gasoline (l
Y	N	A	All Wheel IABEXV06.0501					GP	Gasoline (l
Y	N	A	All Wheel IABEXV06.0501					GP	Gasoline (l
N	N	A	All Wheel IABEXV06.0501					GP	Gasoline (l

5000	10000	15000	20000	25000	30000	35000	40000	45000	50000	55000	60000	65000	70000	75000	80000	85000	90000	95000	100000	105000	110000	115000	120000	125000	130000	135000	140000	145000	150000	155000	160000	165000	170000	175000	180000	185000	190000	195000	200000	205000	210000	215000	220000	225000	230000	235000	240000	245000	250000	255000	260000	265000	270000	275000	280000	285000	290000	295000	300000	305000	310000	315000	320000	325000	330000	335000	340000	345000	350000	355000	360000	365000	370000	375000	380000	385000	390000	395000	400000	405000	410000	415000	420000	425000	430000	435000	440000	445000	450000	455000	460000	465000	470000	475000	480000	485000	490000	495000	500000	505000	510000	515000	520000	525000	530000	535000	540000	545000	550000	555000	560000	565000	570000	575000	580000	585000	590000	595000	600000	605000	610000	615000	620000	625000	630000	635000	640000	645000	650000	655000	660000	665000	670000	675000	680000	685000	690000	695000	700000	705000	710000	715000	720000	725000	730000	735000	740000	745000	750000	755000	760000	765000	770000	775000	780000	785000	790000	795000	800000	805000	810000	815000	820000	825000	830000	835000	840000	845000	850000	855000	860000	865000	870000	875000	880000	885000	890000	895000	900000	905000	910000	915000	920000	925000	930000	935000	940000	945000	950000	955000	960000	965000	970000	975000	980000	985000	990000	995000	1000000
MPG	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650	660	670	680	690	700	710	720	730	740	750	760	770	780	790	800	810	820	830	840	850	860	870	880	890	900	910	920	930	940	950	960	970	980	990	1000																																																																																																			
MPG	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650	660	670	680	690	700	710	720	730	740	750	760	770	780	790	800	810	820	830	840	850	860	870	880	890	900	910	920	930	940	950	960	970	980	990	1000																																																																																																			
MPG	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650	660	670	680	690	700	710	720	730	740	750	760	770	780	790	800	810	820	830	840	850	860	870	880	890	900	910	920	930	940	950	960	970	980	990	1000																																																																																																			
MPG	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650	660	670	680	690	700	710	720	730	740	750	760	770	780	790	800	810	820	830	840	850	860	870	880	890	900	910	920	930	940	950	960	970	980	990	1000																																																																																																			
MPG	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650	660	670	680	690	700	710	720	730	740	750	760	770	780	790	800	810	820	830	840	850	860	870	880	890	900	910	920	930	940	950	960	970	980	990	1000																																																																																																			

Annual Fuel Economy (EPA)	Calculation	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel)	Low'd City	Low'd Hwy	Low'd Cor	City2 Unadjusted
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3499		3499 updated with new 2010 unit fuel price					
3230		3230 updated with 2010 fuel unit price					
3499		3499 Added more base level information. Updated with 2010 unit price of \$2.80					
2999		2999 updated with new unit price of \$.280					

[illegible]

Alternative Fuel	Engine Displacement	Intake Valve	Exhaust Valve	Carline CI	Carline CI	Car/Truck Calc	Appr Sales
2	2	5	Midsize C	car	Derived 5-	(b) (4)	
2	2	4	Compact C	car	Derived 5-		
2	2	3	Subcompact	car	Derived 5-		
2	2	1	Two Seater	car	Vehicle Sp		

Release Date DEPA FE L: Mfr Contact E Contact Phone

6/3/2009	1842	RICHARD	Richard.Tr	248 754 4213
6/3/2009	1843	RICHARD	Richard.Tr	248 754 4213
6/3/2009	1844	RICHARD	Richard.Tr	248 754 4213
6/24/2009	1845	RICHARD	Richard.Tr	248 754 4213

EPA com	VERIFY cc	Model Yr	Mfr Name	Division	Carline	Verify Mfr Index (Mo	Eng Displ	# Cyl
Warning - if trans type is A								
2011	Bugatti	Bugatti	Veyron	BGT	1	8.0	16	

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd Hw	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Auto(S7)	8	14	10				9.5	17.8	12.0228

Gas	Cylinders	Fuel	Comb 5-C	Guzzler?	Air Aspir	Air Aspira	Trans	Trans Des	Trans, Oth	# Gears
8.1	14.1	10.0184	G	TC	Turbochar	SA	Semi-Automatic			7

Trans Loc	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - I	Fuel Usag	Fuel Usag
N	N		44-Wheel DABGT	V08.0V16				GPR	Gasoline (l

5000	10000	15000	20000	25000	30000	35000	40000	45000	50000	55000	60000	65000	70000	75000	80000	85000	90000	95000	100000
MPG	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Leaded	Required	Required	Required	Required	Required	Required	Required	Required	Required	Required	Required	Required	Required	Required	Required	Required	Required	Required	Required
Exempt	Not exempt	Not exempt	Not exempt	Not exempt	Not exempt	Not exempt	Not exempt	Not exempt	Not exempt	Not exempt	Not exempt	Not exempt	Not exempt	Not exempt	Not exempt	Not exempt	Not exempt	Not exempt	Not exempt

Annual Fuel	EPA Calc	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel	Low'd City	Low'd Hw	Low'd Cor	City2 Un
4200		4200 updated with 2010 unit price of \$2.80					

[illegible]

Alternative Fuel	Engine Displacement	Intake Valve	Exhaust Valve	Carline CI	Carline CI	Car/Truck	Calc	Appr	Sales
Two Seater	2	2	1	Two Seater	Two Seater	Two Seater	Vehicle Sp		15

Ref ID	DEPA FE L	Mfr Conta	Contact E	Contact Phone
9/16/2009	1854	RICHARD	Richard.Tr	248 754 4213

EPA com	VERIFY cc	Model Yr	Mfr Name	Division	Carline	Verify Mfr Index (Mo	Eng Displ	# Cyl
Warning - if trans type is A	2010	Lamborghini	Lamborghini	MURCIEL/NLX		4	6.5	12
	2010	Lamborghini	Lamborghini	MURCIEL/NLX		2	6.5	12
Warning - Y	2010	Lamborghini	Lamborghini	MurcielagcNLX		81	6.5	12
Warning - if trans type is A	2010	Lamborghini	Lamborghini	MURCIEL/NLX		5	6.5	12
Y	2010	Lamborghini	Lamborghini	MURCIEL/NLX		3	6.5	12

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd Hw	Low'd Coi	City Unad	Hwy Unad	Comb Unad
Auto(AM6)	9	14	11				10.9	19.9	13.6852
Manual(M6	8	13	10				10.1	17.5	12.4735
Auto(AM6) Please revise Verify or call EPA to explain. Please delete from the database if vehicles are not offered for sale in									
Auto(AM6)	9	14	11				10.9	19.9	13.6852
Manual(M6	8	13	10				10.1	17.5	12.4735

City	Cylinders	Fuel	Comb	5-C	Guzzler?	Air Aspir	Air Aspira	Trans	Trans Des	Trans, Oth	# Gears
					G	NA	Naturally	AM	Automated	Manual	6
					G	NA	Naturally	AM	Manual		6
the US.	Please	revise	Verify;		G	NA	Naturally	AM	Automated	Manual	6
					G	NA	Naturally	AM	Automated	Manual	6
					G	NA	Naturally	AM	Manual		6

Trans Loc	Trans Cre	Drive Sys	Drive Des	Primary B	Max Ethar	Max Biodi	Range1 - I	Fuel Usag	Fuel Usag
N	N	A	All Wheel IANLXV06.5474					GP	Gasoline (l
N	N	A	All Wheel IANLXV06.5474					GP	Gasoline (l
N	N	A	All Wheel IANLXV06.5474					GP	Gasoline (l
N	N	A	All Wheel IANLXV06.5474					GP	Gasoline (l
N	N	A	All Wheel IANLXV06.5474					GP	Gasoline (l

Firearm	Function	Fire	Gas Guzz	Gas Guzz	2Dr Pass	2Dr Lugg	4Dr Pass	4Dr Lugg	Htchbk Pa	Htchbk Lu
MP	leaded	Recom	ended		Not exempt					
MP	leaded	Recom	ended		Not exempt					
MP	leaded	Recom	ended		Not exempt					
MP	leaded	Recom	ended		Not exempt					
MP	leaded	Recom	ended		Not exempt					

Annual Fuel Economy (EPA)	Calculation	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel)	Low'd City2	Low'd Hwy	Low'd Cor	City2 Unadjusted
3818		3818corrected to automated manual trans, updated with 2010 price of \$2.80					
4200		4200updated with 2010 unit price of \$2.80					
3818		3818corrected to automated manual trans, updated with 2010 unit price of \$2.80					
3818		3818corrected to automated manual trans, updated with 2010 unit price of \$2.80					
4200		4200updated with 2010 unit price of \$2.80					

[illegible]

Full Alternative Fuel	Engine Displacement	Intake Valve	Exhaust Valve	Carline CI	Carline CI	Car/Truck Calc	Appr Sales
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2	2	1	Two Seatecar	Derived 5-		
2	2	1	Two Seatecar	Derived 5-		
2	2	1	Two Seatecar	Derived 5-		
2	2	1	Two Seatecar	Derived 5-		
2	2	1	Two Seatecar	Derived 5-		

(b) (4)

Release	DEPA	FE L	Mfr	Conta	Contact E	Contact Phone
5/22/2009	1848	RICHARD	Richard.Tr	248	754	4213
5/22/2009	1846	RICHARD	Richard.Tr	248	754	4213
7/24/2009	1855	RICHARD	Richard.Tr	248	754	4213
5/22/2009	1849	RICHARD	Richard.Tr	248	754	4213
5/22/2009	1847	RICHARD	Richard.Tr	248	754	4213

EPA com	VERIFY cc	Model Yr	Mfr Name	Division	Carline	Verify Mfr Index (Mo	Eng Displ # Cyl	
Diesel; Warning - if trans type is A	2010	Volkswage	Audi	A3	VWX	76	2.0	4
Warning - if trans type is A	2010	Volkswage	Audi	Q7	VWX	62	3.6	6
Warning - if trans type is A	2010	Volkswage	Volkswage	CC	VWX	71	3.6	6
Warning - if trans type is A	2010	Volkswage	Volkswage	CC 4MOTIV	VWX	72	3.6	6
Warning - if trans type is A	2010	Volkswage	Volkswage	EOS	VWX	68	2.0	4
Diesel;	2010	Volkswage	Volkswage	GOLF	VWX	79	2.0	4
Diesel; Warning - if trans type is A	2010	Volkswage	Volkswage	GOLF	VWX	75	2.0	4
Warning - if trans type is A	2010	Volkswage	Volkswage	GOLF	VWX	28	2.5	5
	2010	Volkswage	Volkswage	GOLF	VWX	31	2.5	5
Diesel;	2010	Volkswage	Volkswage	JETTA	VWX	77	2.0	4
Diesel; Warning - if trans type is A	2010	Volkswage	Volkswage	JETTA	VWX	74	2.0	4
Warning - if trans type is A	2010	Volkswage	Volkswage	JETTA	VWX	27	2.5	5
	2010	Volkswage	Volkswage	JETTA	VWX	30	2.5	5
Diesel;	2010	Volkswage	Volkswage	JETTA SP	VWX	78	2.0	4
Diesel; Warning - if trans type is A	2010	Volkswage	Volkswage	JETTA SP	VWX	73	2.0	4
Warning - if trans type is A	2010	Volkswage	Volkswage	JETTA SP	VWX	26	2.5	5
	2010	Volkswage	Volkswage	JETTA SP	VWX	29	2.5	5
	2010	Volkswage	Volkswage	NEW BEE	VWX	67	2.5	5
Warning - if trans type is A	2010	Volkswage	Volkswage	NEW BEE	VWX	65	2.5	5
Warning - if trans type is A	2010	Volkswage	Volkswage	NEW BEE	VWX	66	2.5	5
Warning - if trans type is A	2010	Volkswage	Volkswage	PASSAT	VWX	52	2.0	4
Warning - if trans type is A	2010	Volkswage	Volkswage	PASSAT	VWX	54	2.0	4
Warning - if trans type is A	2010	Volkswage	Volkswage	TOUAREC	VWX	61	3.6	6

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd Hw	Low'd Coi	City Unad	Hwy Unad	Comb Unad
Auto(S6)	30	42	34				38.8462	60.1	46.1981
Auto(S6)	14	20	16				17.745	27.3112	21.0653
Auto(S6)	18	27	21				21.2	35.1	25.7972
Auto(S6)	17	25	20				20.5	33.5	24.8373
Auto(S6)	22	29	25				28.0251	41.3156	32.7685
Manual(M6	30	41	34				38.7511	58.535	45.7021
Auto(S6)	30	42	34				38.8462	60.1	46.1981
Auto(A6)	23	30	26				27.2668	40.2409	31.8941
Manual(M6	22	30	25				25.18	39.6147	30.1185
Manual(M6	30	41	34				38.7511	58.535	45.7021
Auto(S6)	30	42	34				38.8462	60.1	46.1981
Auto(A6)	23	30	25				27.0008	40.0169	31.6305
Manual(M6	22	30	25				24.8525	39.5714	29.8486
Manual(M6	30	41	34				38.7511	58.535	45.7021
Auto(S6)	30	42	34				38.8462	60.1	46.1981
Auto(A6)	23	30	25				27.0008	40.0169	31.6305
Manual(M6	22	30	25				24.8525	39.5714	29.8486
Manual(M6	20	28	23				24.9892	39.3753	29.9061
Auto(S6)	20	29	23				25.1733	40.8	30.4155
Auto(S6)	20	28	23				24.8461	39.7267	29.8832
Auto(S6)	22	31	25				27.1189	42	32.2629
Auto(S6)	22	31	25				27.1189	42	32.2629
Auto(S6)	14	20	16				17.745	27.3112	21.0653

City	Model	Year	Fuel	Comb	5-C	Guzzler?	Air Aspir	I	Air Aspira	Trans	Trans Des	Trans, Otr	# Gears
							TC		Turbochar	SA	Semi-Automatic		6
							NA		Naturally	SA	Semi-Automatic		6
	17.5	26.6	20.6843				NA		Naturally	SA	Semi-Automatic		6
	16.9	25.2	19.8407				NA		Naturally	SA	Semi-Automatic		6
	22.18	29.4583	24.9545				TC		Turbochar	SA	Semi-Automatic		6
							TC		Turbochar	M	Manual		6
							TC		Turbochar	SA	Semi-Automatic		6
	22.9556	30.026	25.6764				NA		Naturally	AA	Automatic		6
	21.7583	30.3987	24.9495				NA		Naturally	AM	Manual		5
							TC		Turbochar	M	Manual		6
							TC		Turbochar	SA	Semi-Automatic		6
	22.69	29.757	25.4051				NA		Naturally	AA	Automatic		6
	21.779	30.2556	24.9209				NA		Naturally	AM	Manual		5
							TC		Turbochar	M	Manual		6
							TC		Turbochar	SA	Semi-Automatic		6
	22.69	29.757	25.4051				NA		Naturally	AA	Automatic		6
	21.779	30.2556	24.9209				NA		Naturally	AM	Manual		5
							NA		Naturally	AM	Manual		5
							NA		Naturally	SA	Semi-Automatic		6
							NA		Naturally	SA	Semi-Automatic		6
	21.9904	30.747	25.2229				TC		Turbochar	SA	Semi-Automatic		6
	21.9904	30.747	25.2229				TC		Turbochar	SA	Semi-Automatic		6
							NA		Naturally	SA	Semi-Automatic		6

Trans	Loc	Trans	Cre	Drive	Sys	Drive	Des	Primary	B	Max	Ethar	Max	Biodi	Range	1 - IFuel	Usag	Fuel	Usag
N	N		F	2-Wheel		DAVWXV02.0U5N							5		DU		Diesel, ultr	
N	N		A	All Wheel		IAVWXT03.6U76									GP		Gasoline (l	
N	N		F	2-Wheel		DAVWXV03.6U46									GP		Gasoline (l	
N	N		A	All Wheel		IAVWXV03.6U46									GP		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.03UA									GP		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.0U5N							5		DU		Diesel, ultr	
N	N		F	2-Wheel		DAVWXV02.0U5N							5		DU		Diesel, ultr	
N	N		F	2-Wheel		DAVWXV02.5U35									G		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.5U35									G		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.0U5N							5		DU		Diesel, ultr	
N	N		F	2-Wheel		DAVWXV02.0U5N							5		DU		Diesel, ultr	
N	N		F	2-Wheel		DAVWXV02.5U35									G		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.5U35									G		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.0U5N							5		DU		Diesel, ultr	
N	N		F	2-Wheel		DAVWXV02.0U5N							5		DU		Diesel, ultr	
N	N		F	2-Wheel		DAVWXV02.5U35									G		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.5U35									G		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.5253									G		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.5253									G		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.5253									G		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.03UA									GP		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.03UA									GP		Gasoline (l	
N	N		A	All Wheel		IAVWXT03.6U76									GP		Gasoline (l	

Annual Fuel Economy (EPA)	Calculation	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Low'd City Low'd Hw Low'd Cor City2 Unadjusted)
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1191	1191	updated with 2010 units price of \$2.70 Diesel	
2625	2625updated 2010 fuel unit price of \$2.80	
1999	1999	..update to 2010 fuel unit price of \$2.80	
2100	2100	..update to 2010 fuel unit price of \$2.80	
1680	1680	this is a double clutch transmission and it has no torque converter with a lock-up.....updated w	
1191	1191	updated with 2010 fuel unit price of \$2.70 Diesel	
1191	1191	updated with 2010 units price of \$2.70 Diesel	
1502	1502	CORRECTED MODEL TYPE FE AND ANNUAL FUEL COST FOR THIS GOLF ..update to 2	
1560	1560	..update to 2010 fuel unit price of \$2.60	
1191	1191	updated with 2010 fuel unit price of \$2.70 Diesel	
1191	1191	updated with 2010 units price of \$2.70 Diesel	
1560	1560	..update to 2010 fuel unit price of \$2.60	
1560	1560	..update to 2010 fuel unit price of \$2.60	
1191	1191	updated with 2010 fuel unit price of \$2.70 Diesel	
1191	1191	updated with 2010 units price of \$2.70 Diesel	
1560	1560	..update to 2010 fuel unit price of \$2.60	
1560	1560	..update to 2010 fuel unit price of \$2.60	
1696	1696	updated with 2010 fuel unit price of \$2.60	
1696	1696	updated with 2010 unit price for regular at \$2.60	
1696	1696	updated with 2010 fuel unit price of \$2.60	
1680	1680	CORRECTED DATA SUB TO NO SUB FOR ALL TESTS,updated with 2010 unit fuel price	
1680	1680updated with 2010 unit fuel price of \$2.80	
2625	2625updated 2010 fuel unit price of \$2.80	

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ith 2010 unit price of \$2.80

010 fuel unit price of \$2.60

e of \$2.80

Alternative Fuel	Engine Displacement	Intake Valve	Exhaust Valve	Carline	CI	Carline	CI	Car/Truck	Calc	Appr	Sales
2	2			7 Small Staticar		Derived 5-i					2192
2	2			23 Special Pu		1 Derived 5-i					2963
2	2			4 Compact Ccar		Vehicle Sp					561
2	2			4 Compact Ccar		Vehicle Sp					1401
2	2			3 Subcompacar		Vehicle Sp					5216
2	2			4 Compact Ccar		Derived 5-i					554
2	2			4 Compact Ccar		Derived 5-i					1294
2	2			4 Compact Ccar		Vehicle Sp					6292
2	2			4 Compact Ccar		Vehicle Sp					1388
2	2			4 Compact Ccar		Derived 5-i					5339
2	2			4 Compact Ccar		Derived 5-i					21358
2	2			4 Compact Ccar		Vehicle Sp					46059
2	2			4 Compact Ccar		Vehicle Sp					4577
2	2			7 Small Staticar		Derived 5-i					2260
2	2			7 Small Staticar		Derived 5-i					9040
2	2			7 Small Staticar		Vehicle Sp					2826
2	2			7 Small Staticar		Vehicle Sp					141
2	2			3 Subcompacar		Derived 5-i					999
2	2			3 Subcompacar		Derived 5-i					10101
2	2			2 Minicompacar		Derived 5-i					5500
2	2			5 Midsize Ccar		Vehicle Sp					6000
2	2			8 Midsize Stcar		Vehicle Sp					2994
2	2			23 Special Pu		1 Derived 5-i					3736

Relabel Date	DEPA FE Label Dataset	Unique Label	RecRelabel	Relabel Date	Suppress	Police/EmComment
7/22/2009	1896	N	N		N	N
7/22/2009	1933	N	N		N	N
7/22/2009	1926	N	N		N	N
7/22/2009	1927	N	N		N	N
7/22/2009	1906	N	N		N	N
7/22/2009	1902	N	N		N	N
7/22/2009	1897	N	N		N	N
6/18/2009	1922	N	N		N	N
6/18/2009	1925	N	N		N	N
7/22/2009	1900	N	N		N	N
7/22/2009	1898	N	N		N	N
6/18/2009	1921	N	N		N	N
6/18/2009	1924	N	N		N	N
7/22/2009	1901	N	N		N	N
7/22/2009	1899	N	N		N	N
6/18/2009	1920	N	N		N	N
6/18/2009	1923	N	N		N	N
7/22/2009	1918	N	N		N	N
7/22/2009	1917	N	N		N	N
7/22/2009	1919	N	N		N	N
6/12/2009	1903	N	N		N	N
6/12/2009	1904	N	N		N	N
7/22/2009	1932	N	N		N	N

End Cyl Deact Var Valve Var Valve Var Valve Var Valve Energy St Energy St Energy St # Batterie:

N		N		N
N		Y	INTAKE/E:N	
N		Y	INTAKE/E:N	
N		Y	INTAKE/E:N	
N		Y	CONTINUIN	
N		N		N
N		N		N
N		Y	INLET CON	
N		Y	INLET CON	
N		N		N
N		N		N
N		Y	INLET CON	
N		Y	INLET CON	
N		N		N
N		N		N
N		Y	INLET CON	
N		Y	INLET CON	
N		Y	INLET CON	
N		Y	INLET CON	
N		Y	INLET CON	
N		Y	CONTINUIN	
N		Y	CONTINUIN	
N		Y	INTAKE/E:N	

Battery Ty	Battery Ty	Battery Ty	Total Volt	Batt Ener	Batt Spec	Batt Char	Batt Char	Comment	# Capacit
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JUSTING	ROTATION	ANGLE							
LY ADJUSTING	ROTATION	ANGLE							
LY ADJUSTING	ROTATION	ANGLE							

JUSTING	ROTATION	ANGLE							
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Regen Br&Regen Br&Regen Br&Regen Br&Regen Br&Driver CntFuel Cell IUsable H2Fuel Cell (HEV-EV C

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EPA comn	VERIFY cc	Model Yr	Mfr Name	Division	Carline	Verify Mfr Index (Mo	Eng Displ	# Cyl	
Annual fue	Y	2010	Audi	Audi	A3	ADX	46	2.0	4
Warning - Y		2010	Audi	Audi	A3	ADX	47	2.0	4
Warning - if trans type is A	2010	Audi	Audi	A3 QUATT	ADX		43	2.0	4
	2010	Audi	Audi	A4	ADX		18	2.0	4
	2010	Audi	Audi	A4 AVANT	ADX		20	2.0	4
	2010	Audi	Audi	A4 QUATT	ADX		24	2.0	4
	2010	Audi	Audi	A4 QUATT	ADX		21	2.0	4
	2010	Audi	Audi	A5 Cabriol	ADX		19	2.0	4
	2010	Audi	Audi	A5 Cabriol	ADX		23	2.0	4
	2010	Audi	Audi	A5 QUATT	ADX		25	2.0	4
	2010	Audi	Audi	A5 QUATT	ADX		22	2.0	4
Warning - if trans type is A	2010	Audi	Audi	A5 QUATT	ADX		60	3.2	6
	2010	Audi	Audi	A6	ADX		59	3.2	6
	2010	Audi	Audi	A6 AVANT	ADX		35	3.0	6
	2010	Audi	Audi	A6 QUATT	ADX		34	3.0	6
	2010	Audi	Audi	A6 QUATT	ADX		8	4.2	8
	2010	Audi	Audi	A8	ADX		7	4.2	8
	2010	Audi	Audi	A8 L	ADX		6	4.2	8
Warning - if trans type is A	2010	Audi	Audi	Q5	ADX		48	3.2	6
Diesel; Warning - if trans type is A	2010	Audi	Audi	Q7	ADX		63	3.0	6
	2010	Audi	Audi	Q7	ADX		11	4.2	8
	2010	Audi	Audi	R8	ADX		33	4.2	8
	2010	Audi	Audi	R8	ADX		32	4.2	8
Warning - if trans type is A	2010	Audi	Audi	R8	ADX		16	5.2	10
	2010	Audi	Audi	R8	ADX		17	5.2	10
	2010	Audi	Audi	S4	ADX		36	3.0	6
Warning - if trans type is A	2010	Audi	Audi	S4	ADX		37	3.0	6
	2010	Audi	Audi	S5	ADX		10	4.2	8
	2010	Audi	Audi	S5	ADX		9	4.2	8
Warning - if trans type is A	2010	Audi	Audi	S5 Cabriol	ADX		38	3.0	6
Warning - if trans type is A	2010	Audi	Audi	S6	ADX		42	5.2	10
Warning - if trans type is A	2010	Audi	Audi	TT COUPE	ADX		44	2.0	4
Warning - if trans type is A	2010	Audi	Audi	TT ROAD&	ADX		45	2.0	4
	2010	Audi	Lamborghini	Gallardo	CADX		12	5.2	10
	2010	Audi	Lamborghini	Gallardo	CADX		14	5.2	10
Warning - if trans type is A	2010	Audi	Lamborghini	Gallardo	SADX		13	5.2	10
	2010	Audi	Lamborghini	Gallardo	SADX		15	5.2	10
	2010	Audi	Volkswage	EOS	ADX		57	2.0	4
	2010	Audi	Volkswage	GTI	ADX		56	2.0	4
Warning - if trans type is A	2010	Audi	Volkswage	GTI	ADX		70	2.0	4
	2010	Audi	Volkswage	JETTA	ADX		55	2.0	4
Warning - if trans type is A	2010	Audi	Volkswage	JETTA	ADX		69	2.0	4
	2010	Audi	Volkswage	PASSAT	CADX		58	2.0	4
Warning - if trans type is A	2010	Audi	Volkswage	PASSAT	CADX		53	2.0	4
	2010	Audi	Volkswage	TIGUAN	ADX		51	2.0	4
Warning - if trans type is A	2010	Audi	Volkswage	TIGUAN	ADX		50	2.0	4
Warning - if trans type is A	2010	Audi	Volkswage	TIGUAN 4	ADX		49	2.0	4
Diesel; Warning - if trans type is A	2010	Audi	Volkswage	Touareg	ADX		64	3.0	6

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd Hw	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Manual(S6)	21	28	24	25.2906	40.4003	30.4083			
Auto(S6)	21	28	24	27.2	37.1	30.9119			
Auto(AV)	23	30	26	29.2373	42.7743	34.0926			
Auto(S6)	21	27	23	25.9563	37.7989	30.2164			
Manual(M6)	22	30	25	27.6402	42.575	32.8212			
Auto(S6)	21	27	23	25.9563	37.7989	30.2164			
Auto(AV)	23	30	26	29.2373	42.7743	34.0926			
Auto(S6)	20	26	23	25.9	37	29.9422			
Manual(M6)	22	30	25	27.6402	42.575	32.8212			
Auto(S6)	21	27	23	25.9563	37.7989	30.2164			
Auto(S6)	18	27	21	22.6	36.2	27.1981			
Auto(AV)	18	28	22	23	38.9	28.184			
Auto(S6)	18	26	21	21.7553	34.7286	26.1514			
Auto(S6)	18	26	21	21.7553	34.7286	26.1514			
Auto(S6)	16	23	18	19.8911	31.5002	23.8458			
Auto(S6)	16	23	18	19.8911	31.5002	23.8458			
Auto(S6)	16	23	18	19.8911	31.5002	23.8458			
Auto(S6)	18	23	20	22.7	30.7	25.7155			
Auto(S6)	17	25	20	19.8	33.2	24.1943			
Auto(S6)	13	18	15	16.2	24.6	19.1412			
Manual(M6)	12	19	15	15.3	26.8	18.9614			
Auto(S6)	13	18	15	15.4	25.0451	18.6283			
Auto(AM6)	13	20	16	15.8	24.8	18.8839			
Manual(M6)	12	20	15	13.7	23.9	16.9565			
Manual(M6)	18	27	21	21.5	34.1	25.7879			
Auto(S7)	18	28	21	21.6	35	26.096			
Manual(M6)	14	22	17	17.3	29.3	21.2088			
Auto(S6)	16	24	19	20.4	31	24.1098			
Auto(S7)	17	26	20	20.3	34	24.7961			
Auto(S6)	14	19	16	17.2	26.7	20.4789			
Auto(S6)	21	29	24	27.5267	39.7256	31.9404			
Auto(S6)	21	29	24	27.5267	39.7256	31.9404			
Auto(AM6)	14	20	16	16.1	25.4	19.276			
Manual(M6)	12	20	15	14	24	17.2308			
Auto(AM6)	13	20	16	16	25.4	19.197			
Manual(M6)	12	20	14	13	22.6	16.0722			
Manual(M6)	21	31	25	26.0803	41.521	31.3218			
Manual(M6)	21	31	25	26.0803	41.521	31.3218			
Auto(S6)	24	32	27	29.8294	43.5414	34.7546			
Manual(M6)	21	31	25	26.0803	41.521	31.3218			
Auto(S6)	24	32	27	29.8294	43.5414	34.7546			
Manual(M6)	21	31	25	26.0803	41.521	31.3218			
Auto(S6)	22	31	25	27.1189	42	32.2629			
Manual(M6)	19	26	21	23.3	36.2	27.75			
Auto(S6)	18	24	21	22.9	34.1	26.8716			
Auto(S6)	18	24	20	22.5	33.3	26.3449			
Auto(S6)	18	25	20	21.9	34.4	26.1811			

City	Engine	5-09	Comb 5-C	Guzzler?	Air Aspir	Air Aspir	Trans	Trans Des	Trans, Ott	# Gears
6; Please revise/clarify; 20.9	20.7906	30	24.123		TC	Turbochar	M	Manual		6
	21.6629	27.7215	23.9585		TC	Turbochar	SA	Semi-Automatic		6
	20.9	28.1	23.6239		TC	Turbochar	SA	Semi-Automatic		6
					TC	Turbochar	CVT	Continuously Variable		1
					TC	Turbochar	SA	Semi-Automatic		6
					TC	Turbochar	M	Manual		6
					TC	Turbochar	SA	Semi-Automatic		6
					TC	Turbochar	CVT	Continuously Variable		1
					TC	Turbochar	SA	Semi-Automatic		6
					TC	Turbochar	M	Manual		6
					TC	Turbochar	SA	Semi-Automatic		6
	18.2	27.2	21.384		NA	Naturally	ASA	Semi-Automatic		6
					NA	Naturally	ACVT	Continuously Variable		1
	17.6	25.9	20.6407		SC	Superchar	SA	Semi-Automatic		6
	17.6	25.9	20.6407		SC	Superchar	SA	Semi-Automatic		6
					NA	Naturally	ASA	Semi-Automatic		6
				NA	Naturally	ASA	Semi-Automatic		6	
				NA	Naturally	ASA	Semi-Automatic		6	
17.8	22.9	19.7826		NA	Naturally	ASA	Semi-Automatic		6	
16.6	24.8	19.5017		TC	Turbochar	SA	Semi-Automatic		6	
				NA	Naturally	ASA	Semi-Automatic		6	
			G	NA	Naturally	AM	Manual		6	
			G	NA	Naturally	ASA	Semi-Automatic		6	
13.3	19.5	15.5206	G	NA	Naturally	AM	Automated Manual		6	
11.9	19.9	14.5282	G	NA	Naturally	AM	Manual		6	
17.8	26.7	20.9412		SC	Superchar	M	Manual		6	
17.7	27.8	21.1593		SC	Superchar	SA	Semi-Automatic		7	
14.3	21.9	16.9464	G	NA	Naturally	AM	Manual		6	
16.5	24.2	19.2573		NA	Naturally	ASA	Semi-Automatic		6	
16.7	26.1	19.93		SC	Superchar	SA	Semi-Automatic		7	
			G	NA	Naturally	ASA	Semi-Automatic		6	
21.2766	29.052	24.1899		TC	Turbochar	SA	Semi-Automatic		6	
21.2766	29.052	24.1899		TC	Turbochar	SA	Semi-Automatic		6	
13.5	19.8	15.756	G	NA	Naturally	AM	Automated Manual		6	
12.1	20	14.7157	G	NA	Naturally	AM	Manual		6	
13.4	19.8	15.6809	G	NA	Naturally	AM	Automated Manual		6	
11.5	19.5	14.1038	G	NA	Naturally	AM	Manual		6	
21.101	30.8701	24.6049		TC	Turbochar	M	Manual		6	
21.101	30.8701	24.6049		TC	Turbochar	M	Manual		6	
24.0933	32.4086	27.2382		TC	Turbochar	SA	Semi-Automatic		6	
21.101	30.8701	24.6049		TC	Turbochar	M	Manual		6	
24.0933	32.4086	27.2382		TC	Turbochar	SA	Semi-Automatic		6	
21.101	30.8701	24.6049		TC	Turbochar	M	Manual		6	
21.9904	30.747	25.2229		TC	Turbochar	SA	Semi-Automatic		6	
				TC	Turbochar	M	Manual		6	
				TC	Turbochar	SA	Semi-Automatic		6	
				TC	Turbochar	SA	Semi-Automatic		6	
17.8	24.6	20.3287		TC	Turbochar	SA	Semi-Automatic		6	

Trans	Loc	Trans	Cre	Drive	Sys	Drive	Des	Primary	B	Max	Ethar	Max	Biodi	Range1	- IFuel	Usag	Fuel	Usag
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UB								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV02.03UB								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV02.03UB								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV02.03UB								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UB								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV02.03UB								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV02.03UB								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV02.03UB								GP		Gasoline	(I
N		N		A		All Wheel	IAADXJ03.23UC								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXJ03.23UC								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV03.03UF								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV03.03UF								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV04.2365								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV04.2365								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV04.2365								GP		Gasoline	(I
N		N		A		All Wheel	IAADXJ03.23UC								GP		Gasoline	(I
N		N		A		All Wheel	IAADXT03.03LD						5		DU		Diesel, ultr	
Y		N		A		All Wheel	IAADXT04.23UD								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV04.2375								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV04.2375								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV05.2LR8								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV05.2LR8								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV03.03UF								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV03.03UF								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV04.2365								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV04.2365								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV03.03UF								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV05.2385								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV02.03UA								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV02.03UA								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV05.2LR8								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV05.2LR8								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV05.2LR8								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV05.2LR8								GP		Gasoline	(I
N		N		F		2-Wheel	DAVWXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV02.03UA								GP		Gasoline	(I
N		N		A		All Wheel	IAADXT03.03LD						5		DU		Diesel, ultr	

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Annual Fuel Economy	EPA Calculated	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Low'd City Low'd Hwy Low'd CO2 City2 Unadjusted)
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1314	1751		
1314	1751		
1751	1751	corrected number of forward gears to 6...updated with 2010 unit price of \$2.80	
1617	1617	updated to 2010 unit price of \$2.80	
1827	1827	update with 2010 unit price of \$2.80	
1680	1680	update with 2010 unit price of \$2.80	
1827	1827	update with 2010 unit price of \$2.80	
1617	1617	updated to 2010 unit price of \$2.80	
1827	1827	update with 2010 unit price of \$2.80	
1680	1680	update with 2010 unit price of \$2.80	
1827	1827	update with 2010 unit price of \$2.80	
1999	1999	updated with 2010 unit price of \$2.80	
1911	1911		
1999	1999	updated with 2010 unit price of \$2.80	
1999	1999	updated with 2010 unit price of \$2.80	
2335	2335	updated with 2010 fuel price of \$2.80	
2335	2335	updated with 2010 fuel price of \$2.80	
2335	2335	updated with 2010 fuel price of \$2.80	
2100	2100	Corrected number of forward gears to 6 from 1.....updated with 2010 fuel unit price of \$2.8	
2025	2025	updated with 2010 unit fuel price of \$2.70 Diesel	
2801	2801	updated with 2010 unit price of \$2.80	
2801	2801	updated to 2010 unit price of \$2.80	
2801	2801	updated with 2010 unit price of \$2.80	
2625	2625	SC03 and Cold CO tests are from Audi R8 configuration 0 of veh 9LR8-RAQ used in Lambor	
2801	2801	SC03 and Cold CO tests are from Audi R8 configuration 0 of veh 9LR8-RMQ used in Lambor	
1999	1999	updated with 2010 unit price of \$2.80	
1999	1999	Corrected trans code to S7 updated with 2010 unit price of \$2.80	
2470	2470	updated with 2010 unit price of \$2.80	
2209	2209	updated with 2010 unit price of \$2.80	
2100	2100	updated with 2010 unit price of \$2.80	
2625	2625	update with 2010 unit price of \$2.80	
1751	1751	corrected number of forward gears to 6...updated with 2010 unit price of \$2.80	
1751	1751	corrected the number of forward gears to 6...updated with 2010 unit price of \$2.80	
2625	2625	SC03 and Cold CO tests are originally from worse case Audi R8 configuration 0 of veh 9LR8	
2801	2801	SC03 and Cold CO tests are from Audi R8 worse case configuration 0 of veh 9LR8-RMQ. up	
2625	2625	SC03 and Cold CO tests are from Audi R8 worse case configuration 0 of veh 9LR8-RAQ. cor	
2999	2999	SC03 and Cold CO tests are from Audi R8 worse case configuration 0 of veh 9LR8-RMQ. Co	
1680	1680	added manuf confirmatory tests for Eos 2.0SA test group.....updated with 2010 unit fuel pric	
1680	1680	added manuf confirmatory tests for SULEV Eos.....updated with 2010 unit fuel price of \$2.80	
1554	1554	this is a double clutch transmission and it has no hydrolic torque converter with a lock-up...up	
1680	1680	corrected manuf code, the manuf confirmatory tests for the Eos in the2.03SA test group w	
1554	1554	this is a double clutch transmission and it has no hydrolic torque converter with a lock-up...up	
1680	1680	mauf confirmatory tests added for Eos ...2.0SA test group.....updated with 2010 unit fuel pric	
1680	1680	CORRECTED SALES VOLUME FOR THIS CC MODEL, SECOND CORRECTION TO LIST T	
1999	1999	corrected to use derived 5-cycle method for label.....updated 2010 fuel unit price of \$2.80	
1999	1999	corrected to use derived 5-cycle label method.....updated 2010 fuel unit price of \$2.80	
2100	2100	changed to derived 5 cycle label calculation.....updated 2010 fuel unit price of \$2.80	
2025	2025	updated with 2010 unit fuel price of \$2.70 Diesel	

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ghini 5 cycle labels. Transmission lock-up corrected to "no". corrected to automated manual trans, updated with 2010 fuel unit price of \$2.80

-RAQ. corrected to automated manual trans, updated with 2010 unit price of \$2.80
dated with 2010 unit price of \$2.80
corrected ETW and IW to 4000lbs corrected to automated manual trans, updated with 2010 unit price of \$2.80
corrected annual fuel cost, updated with 2010 unit price of \$2.80
e of \$2.80

date with 2010 fuel unit price of \$2.80
ere addedupdated with 2010 unit fuel price of \$2.80
date with 2010 fuel unit price of \$2.80
e of \$2.80
HE CC CARLINE CODE AS 293 NOT 291 AT DATA LEVELupdated with 2010 unit fuel price of \$2.80

Alternative Fuel	Engine Displacement	Intake Valve	Exhaust Valve	Carline	CI	Carline	CI	Car/Truck	Calc	Appr	Sales
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(b) (4)

010 fuel unit price of \$2.80

2	2	7	Small Staticar	Vehicle Sp
2	2	7	Small Staticar	Vehicle Sp
2	2	7	Small Staticar	Vehicle Sp
2	2	4	Compact Ccar	Derived 5-i
2	2	7	Small Staticar	Derived 5-i
2	2	4	Compact Ccar	Derived 5-i
2	2	4	Compact Ccar	Derived 5-i
2	2	3	Subcompacar	Derived 5-i
2	2	3	Subcompacar	Derived 5-i
2	2	3	Subcompacar	Derived 5-i
2	2	3	Subcompacar	Derived 5-i
2	2	3	Subcompacar	Vehicle Sp
2	2	5	Midsize Ccar	Derived 5-i
2	2	8	Midsize Stcar	Vehicle Sp
2	2	5	Midsize Ccar	Vehicle Sp
2	2	5	Midsize Ccar	Derived 5-i
2	2	5	Midsize Ccar	Derived 5-i
2	2	6	Large Carscar	Derived 5-i
2	2	23	Special Pu	1 Vehicle Sp
2	2	23	Special Pu	1 Vehicle Sp
2	2	23	Special Pu	1 Derived 5-i
2	2	1	Two Seatecar	Derived 5-i
2	2	1	Two Seatecar	Derived 5-i
2	2	1	Two Seatecar	Vehicle Sp
2	2	1	Two Seatecar	Vehicle Sp
2	2	4	Compact Ccar	Vehicle Sp
2	2	4	Compact Ccar	Vehicle Sp
2	2	3	Subcompacar	Vehicle Sp
2	2	3	Subcompacar	Vehicle Sp
2	2	3	Subcompacar	Vehicle Sp
2	2	5	Midsize Ccar	Derived 5-i
2	2	3	Subcompacar	Vehicle Sp
2	2	1	Two Seatecar	Vehicle Sp
2	2	1	Two Seatecar	Vehicle Sp
2	2	1	Two Seatecar	Vehicle Sp
2	2	1	Two Seatecar	Vehicle Sp
2	2	1	Two Seatecar	Vehicle Sp
2	2	3	Subcompacar	Vehicle Sp
2	2	4	Compact Ccar	Vehicle Sp
2	2	4	Compact Ccar	Vehicle Sp
2	2	4	Compact Ccar	Vehicle Sp
2	2	4	Compact Ccar	Vehicle Sp
2	2	4	Compact Ccar	Vehicle Sp
2	2	22	Special Pu	1 Derived 5-i
2	2	22	Special Pu	1 Derived 5-i
2	2	23	Special Pu	1 Derived 5-i
2	2	23	Special Pu	1 Vehicle Sp

Relabel Date	DEPA FE Label Dataset ID	Unique Label Rec	Relabel	Relabel Date	Suppress	Police/Em	Comment
6/12/2009	1165	N	N		N	N	
6/12/2009	1166	N	N		N	N	
6/5/2009	1892	N	N		N	N	
6/3/2009	1868	N	N		N	N	
6/3/2009	1870	N	N		N	N	
6/3/2009	1874	N	N		N	N	
6/3/2009	1871	N	N		N	N	
6/3/2009	1869	N	N		N	N	
6/3/2009	1873	N	N		N	N	
6/3/2009	1876	N	N		N	N	
6/3/2009	1872	N	N		N	N	
6/22/2009	1895	N	N		N	N	
8/7/2009	2060	N	N		N	N	
6/3/2009	1888	N	N		N	N	
6/3/2009	1887	N	N		N	N	
5/29/2009	1859	N	N		N	N	
5/29/2009	1858	N	N		N	N	
5/29/2009	1857	N	N		N	N	
6/11/2009	1965	N	N		N	N	
6/22/2009	1966	N	N		N	N	TWO CHA
5/29/2009	1863	N	N		N	N	
6/2/2009	1886	N	N		N	N	
6/2/2009	1885	N	N		N	N	
6/25/2009	1866	N	N		N	N	ENGINE C
6/25/2009	1867	N	N		N	N	ENGINE C
6/3/2009	1889	N	N		N	N	
6/3/2009	1890	N	N		N	N	
6/29/2009	1862	N	N		N	N	
6/29/2009	1861	N	N		N	N	
6/3/2009	1891	N	N		N	N	
6/10/2009	1875	N	N		N	N	
6/5/2009	1893	N	N		N	N	
6/5/2009	1894	N	N		N	N	
6/25/2009	1850	N	N		N	N	ENGINE C
6/25/2009	1852	N	N		N	N	ENGINE C
6/25/2009	1851	N	N		N	N	ENGINE C
6/25/2009	1853	N	N		N	N	ENGINE C
6/18/2009	1915	N	N		N	N	
6/18/2009	1914	N	N		N	N	
6/22/2009	1909	N	N		N	N	
6/18/2009	1913	N	N		N	N	
6/22/2009	1908	N	N		N	N	
6/18/2009	1916	N	N		N	N	
6/12/2009	1905	N	N		N	N	
6/12/2009	1931	N	N		N	N	
6/12/2009	1930	N	N		N	N	
6/12/2009	1929	N	N		N	N	
6/22/2009	1967	N	N		N	N	TWO CHA

Chng Cyl Deact Var Valve Var Valve Var Valve Var Valve Energy StEnergy StEnergy St# Batteries:

N		Y	CONTINUIN	
N		Y	CONTINUIN	
N		Y	CONTINUIN	
N		Y	CONTINUITY	AUDI VALVE LIFT SYSTEM
N		Y	CONTINUITY	AUDI VALVE LIFT SYSTEM
N		Y	CONTINUITY	AUDI VALVE LIFT SYSTEM
N		Y	CONTINUITY	AUDI VALVE LIFT SYSTEM
N		Y	CONTINUITY	AUDI VALVE LIFT SYSTEM
N		Y	CONTINUITY	AUDI VALVE LIFT SYSTEM
N		Y	CONTINUITY	AUDI VALVE LIFT SYSTEM
N		Y	CONTINUITY	AUDI VALVE LIFT SYSTEM
N		Y	CONTINUITY	AUDI VALVE LIFT SYSTEM
N		Y	CONTINUIN	
N		Y	CONTINUIN	
N		Y	INLET ANIN	
N		Y	INLET ANIN	
N		Y	INLET ANIN	
N		Y	CONTINUITY	AUDI VALVE LIFT SYSTEM
NR COOLERS.		N	N	
N		Y	INLET ANIN	
N		Y	INLET ANIN	
N		Y	INLET ANIN	
MJ (AUDI R8)		Y	INLET ANIN	
MJ (AUDI R8)		Y	INLET ANIN	
N		Y	CONTINUIN	
N		Y	CONTINUIN	
N		Y	INLET ANIN	
N		Y	INLET ANIN	
N		Y	CONTINUIN	
N		Y	INLET ANIN	
N		Y	CONTINUIN	
MJ (AUDI R8)		Y	INLET ANIN	
MJ (AUDI R8)		Y	INLET ANIN	
MJ (AUDI R8)		Y	INLET ANIN	
MJ (AUDI R8)		Y	INLET ANIN	
N		Y	CONTINUIN	
N		Y	CONTINUIN	
N		Y	CONTINUIN	
N		Y	CONTINUIN	
N		Y	CONTINUIN	
N		Y	CONTINUIN	
N		Y	CONTINUIN	
N		Y	CONTINUIN	
N		Y	CONTINUIN	
N		Y	CONTINUIN	
NR COOLERS.		N	N	

Battery Ty	Battery Ty	Battery Ty	Total Volt	Batt Ener	Batt Spec	Batt Char	Batt Char	Comment	# Capacit
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Regen Br&Regen Br&Regen Br&Regen Br&Regen Br&Driver CntFuel Cell IUsable H2Fuel Cell (HEV-EV C

#	Ctry (kg)	Motor Ger	Motor Ger	Motor Ger	Rated Mo	Mfr Conta	Contact E	Contact Phone
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[illegible]

To: Jim Snyder/AA/USEPA/US@EPA[]
Cc: David Good/AA/USEPA/US@EPA; Robert Peavyhouse/AA/USEPA/US@EPA; Joel Ball/AA/USEPA/US@EPA[]; Robert Peavyhouse/AA/USEPA/US@EPA; Joel Ball/AA/USEPA/US@EPA[]; Joel Ball/AA/USEPA/US@EPA[]
From: "Thomas, Richard"
Sent: Tue 8/18/2009 1:36:30 PM
Subject: RE: Help with the Cash for clunkers -- Please respond with answers to our questions or the missing data in the attached spread sheet: 2009 Audi A6 w/FWD 3.1L
[Dec 08 Notice EPA gen labels.pdf](#)

Hello Jim;

The 2009 Audi A6 models were as follows: 2009 Audi A6 quattro and A6 Avant quattro (AWD) were certified in both 4.2L V8 and 3.0L supercharged V6 test groups and labeled for fuel economy, at that time, in CEFIS. We did certify a 2009 3.1L naturally aspirated V6 for the Audi A6 front wheel drive with CVT transmission. This 3.1L test group was issued a certificate of conformity in CEFIS, late in the season. Because none of the certification data existed in Verify and EPA switched to use the Verify system for labeling, it was not processed in the Verify system, but rather a letter of self approved label values was sent to Dave Good as he requested, copy attached. The values are listed on the attachment to the December 15, 2008 letter.

There are other 3.2L V6 models that exist in 2009, these were A4 quattro and A5 quattro models but no 3.2L Audi A6. The 2010 Audi A6 3.2L with (front) CVT transmission was labeled and certified in Verify.

Please call me with your questions.

Best regards,

Richard E. Thomas
VOLKSWAGEN GROUP OF AMERICA, INC.
3800 Hamlin Road
Auburn Hills, MI 48326
Engineering and Environmental Office (EEO)
Phone: 248 754-4213
Fax: 248 754-4207
Richard.Thomas@VW.com

From: Snyder.Jim@epamail.epa.gov [mailto:Snyder.Jim@epamail.epa.gov]
Sent: Monday, August 17, 2009 5:37 PM
To: Thomas, Richard
Cc: Good.David@epamail.epa.gov; Peavyhouse.Robert@epamail.epa.gov; Ball.Joel@epamail.epa.gov
Subject: Help with the Cash for clunkers -- Please respond with answers to our questions or the missing data in the attached spread sheet: 2009 Audi A6 w/FWD 3.1L

Okay I looked at our database and Cars.gov site again. For 2009, the only A6s listed are the A6 Quattro and A6 Quattro Avant. These are AWD and listed with a 3.0L (super charged) or 4.2L V8.

There is no data for any FWD A6 models. There is no data for any 3.1L. Also, the magazines say there is a 3.2L for 2009 which is confusing. Did we get data on these? If not please supply.

Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

VOLKSWAGEN

GROUP OF AMERICA

Mr. Dave Good
Certification & Compliance Division
U.S. Environmental Protection Agency
2000 Traverwood
Ann Arbor, Michigan 48105

Richard E. Thomas Jr. NAME
Certification Strategist TITLE
EEO DEPARTMENT
248 754 4213 PHONE
248 754 4207 FAX
Richard.Thomas@VW.com E-MAIL

December 15, 2008 DATE

Subject: Notice of Self-Approval of 2009 Audi General Label Fuel Economy Values

VOLKSWAGEN GROUP OF AMERICA, INC.
3800 HAMLIN ROAD
AUBURN HILLS, MI 48326
PHONE +1 248 754 5000

Dear Mr. Good,

In accordance with 40 CFR Part 600, we are notifying EPA of the Self-Approval of 2009 model year general fuel economy label values for the following models:

Audi A6 quattro (3.0L)
Audi A6 Avant quattro (3.0L)
Audi Q5 (3.2L)
Audi A6 (3.1L)

The first three models listed, use the full 5 cycle test method while the Audi A6 (3.1L) uses the derived 5-cycle method. All the values are contained in the following attachment.

If you require additional information or have any questions please contact me directly at (248) 754-4213.

Sincerely,



Richard E. Thomas Jr.
Engineering and Environmental Office

attachments

2009 AUDI FUEL ECONOMY LABEL / FUEL ECONOMY GUIDE INFORMATION

[illegible]

To: richard.thomas@vw.com[]
Cc: "Hopson, Janet L." [hopsonjl@ornl.gov]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]
From: CN=David Good/OU=AA/O=USEPA/C=US
Sent: Thur 8/20/2009 3:59:32 PM
Subject: RE: Please add 2009 Audi A6 3.1L Auto(AV) to www.fueleconomy.gov and cars.gov if possible [Need unadj city/hwy/comb mpg values]

Richard,

Please send Janet & all of us the unadjusted city, hwy and combined mpg values for this vehicle.

Thanks

From: "Hopson, Janet L." <hopsonjl@ornl.gov>
To: David Good/AA/USEPA/US@EPA
Date: 08/20/2009 10:45 AM
Subject: RE: Please add 2009 Audi A6 3.1L Auto(AV) to www.fueleconomy.gov and cars.gov if possible

We'll fix this. Any chance we could get the unadjusted numbers?

Janet

-----Original Message-----

From: Good.David@epamail.epa.gov [mailto:Good.David@epamail.epa.gov]
Sent: Thursday, August 20, 2009 10:39 AM
To: Hopson, Janet L.
Cc: Li, Jia; Snyder.Jim@epamail.epa.gov; richard.thomas@vw.com
Subject: Please add 2009 Audi A6 3.1L Auto(AV) to www.fueleconomy.gov and cars.gov if possible

Janet,

Here's one which slipped thru the cracks. The data was partially in our old CFEIS data base and partially in our new Verify data base. If possible can you put it on the web?

[Note: The other A6 and Q5 models in the pdf should already be on the web.]

Thanks

Dave

----- Forwarded by David Good/AA/USEPA/US on 08/20/2009 10:32 AM -----

From: Debra Piper/AA/USEPA/US
To: David Good/AA/USEPA/US@EPA
Date: 08/20/2009 08:44 AM

Subject: Scan of chart for VW

(See attached file: Volkswagon Economy Guide.pdf)

To: "Hopson, Janet L." [hopsonjl@ornl.gov]
Cc: Jim Snyder/AA/USEPA/US@EPA;David Good/AA/USEPA/US@EPA[]; avid Good/AA/USEPA/US@EPA[]
From: "Thomas, Richard"
Sent: Thur 8/20/2009 6:47:22 PM
Subject: RE: Please add 2009 Audi A6 3.1L Auto(AV) to www.fueleconomy.gov and cars.gov if possible [Need unadj city/hwy/comb mpg values]
[Audi A6 3.1L 2009 FE.pdf](#)

Hello Janet;

The unadjusted label values for this 3.1L V6 2009 Audi A6 with CVT transmission is: 22.9000 city; 37.3000 highway; 27.7148. Please see the Verify printout index 45 (attached) from my attempt to input it into the system. If you have any questions please feel free to call me.

Thanks,
Richard E. Thomas
VOLKSWAGEN GROUP OF AMERICA, INC.
3800 Hamlin Road
Auburn Hills, MI 48326
Engineering and Environmental Office (EEO)
Phone: 248 754-4213
Fax: 248 754-4207
Richard.Thomas@VW.com

-----Original Message-----

From: Good.David@epamail.epa.gov [mailto:Good.David@epamail.epa.gov]
Sent: Thursday, August 20, 2009 12:00 PM
To: Thomas, Richard
Cc: Hopson, Janet L.; Snyder.Jim@epamail.epa.gov
Subject: RE: Please add 2009 Audi A6 3.1L Auto(AV) to www.fueleconomy.gov and cars.gov if possible [Need unadj city/hwy/comb mpg values]

Richard,

Please send Janet & all of us the unadjusted city, hwy and combined mpg values for this vehicle.

Thanks

From: "Hopson, Janet L." <hopsonjl@ornl.gov>

To: David Good/AA/USEPA/US@EPA

Date: 08/20/2009 10:45 AM

Subject: RE: Please add 2009 Audi A6 3.1L Auto(AV) to
www.fueleconomy.gov and cars.gov if possible

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Sent: Thursday, August 20, 2009 10:39 AM
To: Hopson, Janet L.
Cc: Li, Jia; Snyder.Jim@epamail.epa.gov; richard.thomas@vw.com
Subject: Please add 2009 Audi A6 3.1L Auto(AV) to www.fueleconomy.gov
and cars.gov if possible

Janet,

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old CFEIS data base and partially in our new Verify data base. If
possible can you put it on the web?

[Note: The other A6 and Q5 models in the pdf should already be on the
web.]

Thanks

Dave

----- Forwarded by David Good/AA/USEPA/US on 08/20/2009 10:32 AM -----

From: Debra Piper/AA/USEPA/US

To: David Good/AA/USEPA/US@EPA

Date: 08/20/2009 08:44 AM

Subject: Scan of chart for VW

(See attached file: Volkswagon Economy Guide.pdf)

EPA com	VERIFY cc	Model Yr	Mfr Name	Division	Carline	Verify Mfr Index (Mo	Eng Displ # Cyl	
Diesel; Warning - if trans type is A	2010	Volkswage	Audi	A3	VWX	76	2.0	4
Warning - if trans type is A	2010	Volkswage	Audi	Q7	VWX	62	3.6	6
Warning - if trans type is A	2010	Volkswage	Volkswage	CC	VWX	71	3.6	6
Warning - if trans type is A	2010	Volkswage	Volkswage	CC 4MOTIV	VWX	72	3.6	6
Warning - if trans type is A	2010	Volkswage	Volkswage	EOS	VWX	68	2.0	4
Diesel;	2010	Volkswage	Volkswage	GOLF	VWX	79	2.0	4
Diesel; Warning - if trans type is A	2010	Volkswage	Volkswage	GOLF	VWX	75	2.0	4
Warning - if trans type is A	2010	Volkswage	Volkswage	GOLF	VWX	28	2.5	5
	2010	Volkswage	Volkswage	GOLF	VWX	31	2.5	5
Diesel;	2010	Volkswage	Volkswage	JETTA	VWX	77	2.0	4
Diesel; Warning - if trans type is A	2010	Volkswage	Volkswage	JETTA	VWX	74	2.0	4
Warning - if trans type is A	2010	Volkswage	Volkswage	JETTA	VWX	27	2.5	5
	2010	Volkswage	Volkswage	JETTA	VWX	30	2.5	5
Diesel;	2010	Volkswage	Volkswage	JETTA SP	VWX	78	2.0	4
Diesel; Warning - if trans type is A	2010	Volkswage	Volkswage	JETTA SP	VWX	73	2.0	4
Warning - if trans type is A	2010	Volkswage	Volkswage	JETTA SP	VWX	26	2.5	5
	2010	Volkswage	Volkswage	JETTA SP	VWX	29	2.5	5
	2010	Volkswage	Volkswage	NEW BEE	VWX	67	2.5	5
Warning - if trans type is A	2010	Volkswage	Volkswage	NEW BEE	VWX	65	2.5	5
Warning - if trans type is A	2010	Volkswage	Volkswage	NEW BEE	VWX	66	2.5	5
Warning - if trans type is A	2010	Volkswage	Volkswage	PASSAT	VWX	52	2.0	4
Warning - if trans type is A	2010	Volkswage	Volkswage	PASSAT	VWX	54	2.0	4
Warning - if trans type is A	2010	Volkswage	Volkswage	TOUAREC	VWX	61	3.6	6

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd Cit	Low'd Hw	Low'd Co	City Unad	Hwy Unad	Comb Unad
Auto(S6)	30	42	34				38.8462	60.1	46.1981
Auto(S6)	14	14	14	in model type comment field the date, reason, and regulations for relative to state label val			17.1502	26.31668	20.2810
Auto(S6)	18	27	21				21.2	35.1	25.7972
Auto(S6)	17	25	20				20.5	33.5	24.8373
Auto(S6)	22	29	25				28.0251	41.3156	32.7685
Manual(M6)	30	41	34				38.7511	58.535	45.7021
Auto(S6)	30	42	34				38.8462	60.1	46.1981
Auto(A6)	23	30	26				27.2668	40.2409	31.8941
Manual(M6)	22	30	25				25.18	39.6147	30.1185
Manual(M6)	30	41	34				38.7511	58.535	45.7021
Auto(S6)	30	42	34				38.8462	60.1	46.1981
Auto(A6)	23	30	25				27.0008	40.0169	31.6305
Manual(M6)	22	30	25				24.8525	39.5714	29.8486
Manual(M6)	30	41	34				38.7511	58.535	45.7021
Auto(S6)	30	42	34				38.8462	60.1	46.1981
Auto(A6)	23	30	25				27.0008	40.0169	31.6305
Manual(M6)	22	30	25				24.8525	39.5714	29.8486
Manual(M6)	20	28	23				24.9892	39.3753	29.9061
Auto(S6)	20	29	23				25.1733	40.8	30.4155
Auto(S6)	20	28	23				24.8461	39.7267	29.8832
Auto(S6)	22	31	25				27.1189	42	32.2629
Auto(S6)	22	31	25				27.1189	42	32.2629
Auto(S6)	14	14	14	in model type comment field the date, reason, and regulations for relative to state label val			17.1502	26.31668	20.2810

City	Hydro 1.5	Fuel Comb 5-C	Guzzler?	Air Aspir	Air Aspira	Trans	Trans Des	Trans, Oth	# Gears
				TC	Turbochar	SA	Semi-Automatic		6
ues must not change for entire model year, except for 600.507 (a) 3 and 600.314-08 (e) (4) reasons.];									
17.5	26.6	20.6843		NA	Naturally	SA	Semi-Automatic		6
16.9	25.2	19.8407		NA	Naturally	SA	Semi-Automatic		6
22.18	29.4583	24.9545		TC	Turbochar	SA	Semi-Automatic		6
				TC	Turbochar	M	Manual		6
				TC	Turbochar	SA	Semi-Automatic		6
22.9556	30.026	25.6764		NA	Naturally	AA	Automatic		6
21.7583	30.3987	24.9495		NA	Naturally	AM	Manual		5
				TC	Turbochar	M	Manual		6
				TC	Turbochar	SA	Semi-Automatic		6
22.69	29.757	25.4051		NA	Naturally	AA	Automatic		6
21.779	30.2556	24.9209		NA	Naturally	AM	Manual		5
				TC	Turbochar	M	Manual		6
				TC	Turbochar	SA	Semi-Automatic		6
22.69	29.757	25.4051		NA	Naturally	AA	Automatic		6
21.779	30.2556	24.9209		NA	Naturally	AM	Manual		5
				NA	Naturally	AM	Manual		5
				NA	Naturally	ASA	Semi-Automatic		6
				NA	Naturally	ASA	Semi-Automatic		6
21.9904	30.747	25.2229		TC	Turbochar	SA	Semi-Automatic		6
21.9904	30.747	25.2229		TC	Turbochar	SA	Semi-Automatic		6
ues must not change for entire model year, except for 600.507 (a) 3 and 600.314-08 (e) (4) reasons.];									

Trans	Loc	Trans	Cre	Drive	Sys	Drive	Des	Primary	B	Max	Ethar	Max	Biodi	Range	1 - IFuel	Usag	Fuel	Usag
N	N		F	2-Wheel		DAVWXV02.0U5N							5		DU		Diesel, ultr	
N	N		A	All Wheel		IAVWXT03.6U76									GP		Gasoline (l	
N	N		F	2-Wheel		DAVWXV03.6U46									GP		Gasoline (l	
N	N		A	All Wheel		IAVWXV03.6U46									GP		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.03UA									GP		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.0U5N							5		DU		Diesel, ultr	
N	N		F	2-Wheel		DAVWXV02.0U5N							5		DU		Diesel, ultr	
N	N		F	2-Wheel		DAVWXV02.5U35									G		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.5U35									G		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.0U5N							5		DU		Diesel, ultr	
N	N		F	2-Wheel		DAVWXV02.0U5N							5		DU		Diesel, ultr	
N	N		F	2-Wheel		DAVWXV02.5U35									G		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.5U35									G		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.0U5N							5		DU		Diesel, ultr	
N	N		F	2-Wheel		DAVWXV02.0U5N							5		DU		Diesel, ultr	
N	N		F	2-Wheel		DAVWXV02.5U35									G		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.5U35									G		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.5253									G		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.5253									G		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.5253									G		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.03UA									GP		Gasoline (l	
N	N		F	2-Wheel		DAVWXV02.03UA									GP		Gasoline (l	
N	N		A	All Wheel		IAVWXT03.6U76									GP		Gasoline (l	

5000	Directional Effect	Gas Guzzl	Gas Guzzl	2Dr Pass '2	2Dr Lugg	4Dr Pass '4	4Dr Lugg	Htchbk P2	Htchbk Lu
MPG (15 ppiles maximum)	Not exempt							89	20
MPG (15 ppiles maximum)	Truck								
MPG (15 ppiles maximum)	Not exempt					94	13		
MPG (15 ppiles maximum)	Not exempt					94	13		
MPG (15 ppiles maximum)	Not exempt			77	11				
MPG (15 ppiles maximum)	Not exempt							94	15
MPG (15 ppiles maximum)	Not exempt							94	15
MPG (15 ppiles maximum)	Not exempt							94	15
MPG (15 ppiles maximum)	Not exempt							94	15
MPG (15 ppiles maximum)	Not exempt					91	16		
MPG (15 ppiles maximum)	Not exempt					91	16		
MPG (15 ppiles maximum)	Not exempt					91	16		
MPG (15 ppiles maximum)	Not exempt					91	16		
MPG (15 ppiles maximum)	Not exempt					92	33		
MPG (15 ppiles maximum)	Not exempt					92	33		
MPG (15 ppiles maximum)	Not exempt					92	33		
MPG (15 ppiles maximum)	Not exempt					92	33		
MPG (15 ppiles maximum)	Not exempt							85	12
MPG (15 ppiles maximum)	Not exempt							85	12
MPG (15 ppiles maximum)	Not exempt			78	5				
MPG (15 ppiles maximum)	Not exempt					96	14		
MPG (15 ppiles maximum)	Not exempt					97	36		
MPG (15 ppiles maximum)	Truck								

Annual Fuel Economy (EPA Calc)	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Low'd City Low'd Hw Low'd CorCity2 Unadjusted)
1191	1191 updated with 2010 units price of \$2.70 Diesel	
2625	2625updated 2010 fuel unit price of \$2.80...RELABEL AFTER EPA CONFIRMATORY TEST	
1999	1999 ..update to 2010 fuel unit price of \$2.80	
2100	2100 ..update to 2010 fuel unit price of \$2.80	
1680	1680 this is a double clutch transmission and it has no torque converter with a lock-up.....updated w	
1191	1191 updated with 2010 fuel unit price of \$2.70 Diesel	
1191	1191 updated with 2010 units price of \$2.70 Diesel	
1502	1502 CORRECTED MODEL TYPE FE AND ANNUAL FUEL COST FOR THIS GOLF ..update to 2	
1560	1560 ..update to 2010 fuel unit price of \$2.60	
1191	1191 updated with 2010 fuel unit price of \$2.70 Diesel	
1191	1191 updated with 2010 units price of \$2.70 Diesel	
1560	1560 ..update to 2010 fuel unit price of \$2.60	
1560	1560 ..update to 2010 fuel unit price of \$2.60	
1191	1191 updated with 2010 fuel unit price of \$2.70 Diesel	
1191	1191 updated with 2010 units price of \$2.70 Diesel	
1560	1560 ..update to 2010 fuel unit price of \$2.60	
1560	1560 ..update to 2010 fuel unit price of \$2.60	
1696	1696 updated with 2010 fuel unit price of \$2.60	
1696	1696 updated with 2010 unit price for regular at \$2.60	
1696	1696 updated with 2010 fuel unit price of \$2.60	
1680	1680 CORRECTED DATA SUB TO NO SUB FOR ALL TESTS,updated with 2010 unit fuel price	
1680	1680updated with 2010 unit fuel price of \$2.80	
2625	2625updated 2010 fuel unit price of \$2.80.....RELABEL AFTER EPA CONFIRMATO	

2010 Fuel Unit Price of \$2.80
2010 Fuel Unit Price of \$2.60

ING.....

ith 2010 unit price of \$2.80

010 fuel unit prcie of \$2.60

e of \$2.80

RY TESTING

Alternative Fuel	Engine Displacement	Intake Valve	Exhaust Valve	Carline	CI	Carline	CI	Car/Truck	Calc	Appr	Sales
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	2	2	7	Small Staticar		Derived 5-i					(b) (4)
Under EPA	2	2	23	Special Pu	1	Derived 5-i					
	2	2	4	Compact Ccar		Vehicle Sp					
	2	2	4	Compact Ccar		Vehicle Sp					
	2	2	3	Subcompacar		Vehicle Sp					
	2	2	4	Compact Ccar		Derived 5-i					
	2	2	4	Compact Ccar		Derived 5-i					
	2	2	4	Compact Ccar		Vehicle Sp					
	2	2	4	Compact Ccar		Vehicle Sp					
	2	2	4	Compact Ccar		Derived 5-i					
	2	2	4	Compact Ccar		Derived 5-i					
	2	2	4	Compact Ccar		Vehicle Sp					
	2	2	4	Compact Ccar		Vehicle Sp					
	2	2	7	Small Staticar		Derived 5-i					
	2	2	7	Small Staticar		Derived 5-i					
	2	2	7	Small Staticar		Vehicle Sp					
	2	2	7	Small Staticar		Vehicle Sp					
	2	2	3	Subcompacar		Derived 5-i					
	2	2	3	Subcompacar		Derived 5-i					
	2	2	2	Minicompacar		Derived 5-i					
	2	2	5	Midsize Ccar		Vehicle Sp					
	2	2	8	Midsize Stcar		Vehicle Sp					
Under EPA	2	2	23	Special Pu	1	Derived 5-i					

Relabel Date	FE Label Dataset ID	Unique Label Record	Relabel	Relabel Description	Suppress	Police/EmComment
7/22/2009	1896	N	N		N	N
8/20/2009	2324	Values were 23 14 MPG city, 20 MPG highway, and 16 MPG combined.			N	N
7/22/2009	1926	N	N		N	N
7/22/2009	1927	N	N		N	N
7/22/2009	1906	N	N		N	N
7/22/2009	1902	N	N		N	N
7/22/2009	1897	N	N		N	N
8/18/2009	1922	N	N		N	N
8/18/2009	1925	N	N		N	N
7/22/2009	1900	N	N		N	N
7/22/2009	1898	N	N		N	N
8/18/2009	1921	N	N		N	N
8/18/2009	1924	N	N		N	N
7/22/2009	1901	N	N		N	N
7/22/2009	1899	N	N		N	N
8/18/2009	1920	N	N		N	N
8/18/2009	1923	N	N		N	N
7/22/2009	1918	N	N		N	N
7/22/2009	1917	N	N		N	N
7/22/2009	1919	N	N		N	N
8/12/2009	1903	N	N		N	N
8/12/2009	1904	N	N		N	N
8/20/2009	2324	Values were 23 14 MPG city, 20 MPG highway, and 16 MPG combined.			N	N

Eng Cntr	Cyl Deact	Var Valve	Var Valve	Var Valve	Var Valve	Var Valve	Energy St	Energy St	# Batterie	Battery Ty
N		N								
N		Y		INTAKE/E	N					
N		Y		INTAKE/E	N					
N		Y		INTAKE/E	N					
N		Y		CONTINU	N					
N		N				N				
N		N				N				
N		Y		INLET CO	N					
N		Y		INLET CO	N					
N		N				N				
N		N				N				
N		Y		INLET CO	N					
N		Y		INLET CO	N					
N		N				N				
N		N				N				
N		Y		INLET CO	N					
N		Y		INLET CO	N					
N		Y		INLET CO	N					
N		Y		INLET CO	N					
N		Y		INLET CO	N					
N		Y		CONTINU	N					
N		Y		CONTINU	N					
N		Y		INTAKE/E	N					

Battery Ty	Total Volt	Batt Ener	Batt Spec	Batt Char	Batt Char	# Capacit	Regen Br	Regen Br	Regen Br
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JUSTING ROTATION ANGLE
LY ADJUSTING ROTATION ANGLE
LY ADJUSTING ROTATION ANGLE

JUSTING ROTATION ANGLE

Regen BrkDriver CntFuel Cell IFuel Cell (HEV-EV C# Drive MMotor GerMotor GerMotor GerRated Mot

MF Owner/Contact Phone

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EPA comn	VERIFY cc	Model Yr	Mfr Name	Division	Carline	Verify Mfr Index (Mo	Eng Displ	# Cyl	
Annual fue	Y	2010	Audi	Audi	A3	ADX	46	2.0	4
Warning - Y		2010	Audi	Audi	A3	ADX	47	2.0	4
Warning - if trans type is A	2010	Audi	Audi	A3 QUATT	ADX		43	2.0	4
	2010	Audi	Audi	A4	ADX		18	2.0	4
	2010	Audi	Audi	A4 AVANT	ADX		20	2.0	4
	2010	Audi	Audi	A4 QUATT	ADX		24	2.0	4
	2010	Audi	Audi	A4 QUATT	ADX		21	2.0	4
	2010	Audi	Audi	A5 Cabriol	ADX		19	2.0	4
	2010	Audi	Audi	A5 Cabriol	ADX		23	2.0	4
	2010	Audi	Audi	A5 QUATT	ADX		25	2.0	4
	2010	Audi	Audi	A5 QUATT	ADX		22	2.0	4
Warning - if trans type is A	2010	Audi	Audi	A5 QUATT	ADX		60	3.2	6
	2010	Audi	Audi	A6	ADX		59	3.2	6
	2010	Audi	Audi	A6 AVANT	ADX		35	3.0	6
	2010	Audi	Audi	A6 QUATT	ADX		34	3.0	6
	2010	Audi	Audi	A6 QUATT	ADX		8	4.2	8
	2010	Audi	Audi	A8	ADX		7	4.2	8
	2010	Audi	Audi	A8 L	ADX		6	4.2	8
Warning - if trans type is A	2010	Audi	Audi	Q5	ADX		48	3.2	6
Diesel; Warning - if trans type is A	2010	Audi	Audi	Q7	ADX		63	3.0	6
	2010	Audi	Audi	Q7	ADX		11	4.2	8
	2010	Audi	Audi	R8	ADX		33	4.2	8
	2010	Audi	Audi	R8	ADX		32	4.2	8
Warning - if trans type is A	2010	Audi	Audi	R8	ADX		16	5.2	10
	2010	Audi	Audi	R8	ADX		17	5.2	10
	2010	Audi	Audi	S4	ADX		36	3.0	6
Warning - if trans type is A	2010	Audi	Audi	S4	ADX		37	3.0	6
	2010	Audi	Audi	S5	ADX		10	4.2	8
	2010	Audi	Audi	S5	ADX		9	4.2	8
Warning - if trans type is A	2010	Audi	Audi	S5 Cabriol	ADX		38	3.0	6
Warning - if trans type is A	2010	Audi	Audi	S6	ADX		42	5.2	10
Warning - if trans type is A	2010	Audi	Audi	TT COUPE	ADX		44	2.0	4
Warning - if trans type is A	2010	Audi	Audi	TT ROAD	ADX		45	2.0	4
	2010	Audi	Lamborghini	Gallardo	CADX		12	5.2	10
	2010	Audi	Lamborghini	Gallardo	CADX		14	5.2	10
Warning - if trans type is A	2010	Audi	Lamborghini	Gallardo	SADX		13	5.2	10
	2010	Audi	Lamborghini	Gallardo	SADX		15	5.2	10
	2010	Audi	Volkswage	EOS	ADX		57	2.0	4
	2010	Audi	Volkswage	GTI	ADX		56	2.0	4
Warning - if trans type is A	2010	Audi	Volkswage	GTI	ADX		70	2.0	4
	2010	Audi	Volkswage	JETTA	ADX		55	2.0	4
Warning - if trans type is A	2010	Audi	Volkswage	JETTA	ADX		69	2.0	4
	2010	Audi	Volkswage	PASSAT	CADX		58	2.0	4
Warning - if trans type is A	2010	Audi	Volkswage	PASSAT	CADX		53	2.0	4
	2010	Audi	Volkswage	TIGUAN	ADX		51	2.0	4
Warning - if trans type is A	2010	Audi	Volkswage	TIGUAN	ADX		50	2.0	4
Warning - if trans type is A	2010	Audi	Volkswage	TIGUAN 4	ADX		49	2.0	4
Diesel; Warning - if trans type is A	2010	Audi	Volkswage	Touareg	ADX		64	3.0	6

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd Hw	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Manual(S6)	21	28	24	25.2906	40.4003	30.4083			
Auto(S6)	21	28	24	27.2	37.1	30.9119			
Auto(AV)	23	30	26	29.2373	42.7743	34.0926			
Auto(S6)	21	27	23	25.9563	37.7989	30.2164			
Manual(M6)	22	30	25	27.6402	42.575	32.8212			
Auto(S6)	21	27	23	25.9563	37.7989	30.2164			
Auto(AV)	23	30	26	29.2373	42.7743	34.0926			
Auto(S6)	20	26	23	25.9	37	29.9422			
Manual(M6)	22	30	25	27.6402	42.575	32.8212			
Auto(S6)	21	27	23	25.9563	37.7989	30.2164			
Auto(S6)	18	27	21	22.6	36.2	27.1981			
Auto(AV)	18	28	22	23	38.9	28.184			
Auto(S6)	18	26	21	21.7553	34.7286	26.1514			
Auto(S6)	18	26	21	21.7553	34.7286	26.1514			
Auto(S6)	16	23	18	19.8911	31.5002	23.8458			
Auto(S6)	16	23	18	19.8911	31.5002	23.8458			
Auto(S6)	16	23	18	19.8911	31.5002	23.8458			
Auto(S6)	18	23	20	22.7	30.7	25.7155			
Auto(S6)	17	25	20	19.8	33.2	24.1943			
Auto(S6)	13	18	15	16.2	24.6	19.1412			
Manual(M6)	12	19	15	15.3	26.8	18.9614			
Auto(S6)	13	18	15	15.4	25.0451	18.6283			
Auto(AM6)	13	20	16	15.8	24.8	18.8839			
Manual(M6)	12	20	15	13.7	23.9	16.9565			
Manual(M6)	18	27	21	21.5	34.1	25.7879			
Auto(S7)	18	28	21	21.6	35	26.096			
Manual(M6)	14	22	17	17.3	29.3	21.2088			
Auto(S6)	16	24	19	20.4	31	24.1098			
Auto(S7)	17	26	20	20.3	34	24.7961			
Auto(S6)	14	19	16	17.2	26.7	20.4789			
Auto(S6)	21	29	24	27.5267	39.7256	31.9404			
Auto(S6)	21	29	24	27.5267	39.7256	31.9404			
Auto(AM6)	14	20	16	16.1	25.4	19.276			
Manual(M6)	12	20	15	14	24	17.2308			
Auto(AM6)	13	20	16	16	25.4	19.197			
Manual(M6)	12	20	14	13	22.6	16.0722			
Manual(M6)	21	31	25	26.0803	41.521	31.3218			
Manual(M6)	21	31	25	26.0803	41.521	31.3218			
Auto(S6)	24	32	27	29.8294	43.5414	34.7546			
Manual(M6)	21	31	25	26.0803	41.521	31.3218			
Auto(S6)	24	32	27	29.8294	43.5414	34.7546			
Manual(M6)	21	31	25	26.0803	41.521	31.3218			
Auto(S6)	22	31	25	27.1189	42	32.2629			
Manual(M6)	19	26	21	23.3	36.2	27.75			
Auto(S6)	18	24	21	22.9	34.1	26.8716			
Auto(S6)	18	24	20	22.5	33.3	26.3449			
Auto(S6)	18	25	20	21.9	34.4	26.1811			

City	Engine	5-09	Comb 5-C	Guzzler?	Air Aspir	Air Aspir	Trans	Trans Des	Trans, Ott	# Gears
6; Please revise/clarify; 20.9	20.7906	30	24.123		TC	Turbochar	M	Manual		6
	21.6629	27.7215	23.9585		TC	Turbochar	SA	Semi-Automatic		6
	20.9	28.1	23.6239		TC	Turbochar	SA	Semi-Automatic		6
					TC	Turbochar	CVT	Continuously Variable		1
					TC	Turbochar	SA	Semi-Automatic		6
					TC	Turbochar	M	Manual		6
					TC	Turbochar	SA	Semi-Automatic		6
					TC	Turbochar	CVT	Continuously Variable		1
					TC	Turbochar	SA	Semi-Automatic		6
					TC	Turbochar	M	Manual		6
					TC	Turbochar	SA	Semi-Automatic		6
	18.2	27.2	21.384		NA	Naturally	ASA	Semi-Automatic		6
					NA	Naturally	ACVT	Continuously Variable		1
	17.6	25.9	20.6407		SC	Superchar	SA	Semi-Automatic		6
	17.6	25.9	20.6407		SC	Superchar	SA	Semi-Automatic		6
					NA	Naturally	ASA	Semi-Automatic		6
				NA	Naturally	ASA	Semi-Automatic		6	
				NA	Naturally	ASA	Semi-Automatic		6	
17.8	22.9	19.7826		NA	Naturally	ASA	Semi-Automatic		6	
16.6	24.8	19.5017		TC	Turbochar	SA	Semi-Automatic		6	
				NA	Naturally	ASA	Semi-Automatic		6	
			G	NA	Naturally	AM	Manual		6	
			G	NA	Naturally	ASA	Semi-Automatic		6	
13.3	19.5	15.5206	G	NA	Naturally	AM	Automated Manual		6	
11.9	19.9	14.5282	G	NA	Naturally	AM	Manual		6	
17.8	26.7	20.9412		SC	Superchar	M	Manual		6	
17.7	27.8	21.1593		SC	Superchar	SA	Semi-Automatic		7	
14.3	21.9	16.9464	G	NA	Naturally	AM	Manual		6	
16.5	24.2	19.2573		NA	Naturally	ASA	Semi-Automatic		6	
16.7	26.1	19.93		SC	Superchar	SA	Semi-Automatic		7	
			G	NA	Naturally	ASA	Semi-Automatic		6	
21.2766	29.052	24.1899		TC	Turbochar	SA	Semi-Automatic		6	
21.2766	29.052	24.1899		TC	Turbochar	SA	Semi-Automatic		6	
13.5	19.8	15.756	G	NA	Naturally	AM	Automated Manual		6	
12.1	20	14.7157	G	NA	Naturally	AM	Manual		6	
13.4	19.8	15.6809	G	NA	Naturally	AM	Automated Manual		6	
11.5	19.5	14.1038	G	NA	Naturally	AM	Manual		6	
21.101	30.8701	24.6049		TC	Turbochar	M	Manual		6	
21.101	30.8701	24.6049		TC	Turbochar	M	Manual		6	
24.0933	32.4086	27.2382		TC	Turbochar	SA	Semi-Automatic		6	
21.101	30.8701	24.6049		TC	Turbochar	M	Manual		6	
24.0933	32.4086	27.2382		TC	Turbochar	SA	Semi-Automatic		6	
21.101	30.8701	24.6049		TC	Turbochar	M	Manual		6	
21.9904	30.747	25.2229		TC	Turbochar	SA	Semi-Automatic		6	
				TC	Turbochar	M	Manual		6	
				TC	Turbochar	SA	Semi-Automatic		6	
				TC	Turbochar	SA	Semi-Automatic		6	
17.8	24.6	20.3287		TC	Turbochar	SA	Semi-Automatic		6	

Trans	Loc	Trans	Cre	Drive	Sys	Drive	Des	Primary	B	Max	Ethar	Max	Biodi	Range	1 - IFuel	Usag	Fuel	Usag
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UB								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV02.03UB								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV02.03UB								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV02.03UB								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UB								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV02.03UB								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV02.03UB								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV02.03UB								GP		Gasoline	(I
N		N		A		All Wheel	IAADXJ03.23UC								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXJ03.23UC								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV03.03UF								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV03.03UF								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV04.2365								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV04.2365								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV04.2365								GP		Gasoline	(I
N		N		A		All Wheel	IAADXJ03.23UC								GP		Gasoline	(I
N		N		A		All Wheel	IAADXT03.03LD						5		DU		Diesel, ultr	
Y		N		A		All Wheel	IAADXT04.23UD								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV04.2375								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV04.2375								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV05.2LR8								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV05.2LR8								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV03.03UF								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV03.03UF								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV04.2365								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV04.2365								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV03.03UF								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV05.2385								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV02.03UA								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV02.03UA								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV05.2LR8								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV05.2LR8								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV05.2LR8								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV05.2LR8								GP		Gasoline	(I
N		N		F		2-Wheel	DAVWXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV02.03UA								GP		Gasoline	(I
N		N		A		All Wheel	IAADXT03.03LD						5		DU		Diesel, ultr	

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Annual Fuel EPA Calculation Comment City2 FE (Hwy2 Fuel Comb2 Fuel Low'd City Low'd Hwy Low'd CO City2 Unadjusted

1314	1751
1314	1751
1751	1751 corrected number of forward gears to 6...updated with 2010 unit price of \$2.80
1617	1617 updated to 2010 unit price of \$2.80
1827	1827 update with 2010 unit price of \$2.80
1680	1680 update with 2010 unit price of \$2.80
1827	1827 update with 2010 unit price of \$2.80
1617	1617 updated to 2010 unit price of \$2.80
1827	1827 update with 2010 unit price of \$2.80
1680	1680 update with 2010 unit price of \$2.80
1827	1827 update with 2010 unit price of \$2.80
1999	1999 updated with 2010 unit price of \$2.80
1911	1911
1999	1999 updated with 2010 unit price of \$2.80
1999	1999 updated with 2010 unit price of \$2.80
2335	2335 updated with 2010 fuel price of \$2.80
2335	2335 updated with 2010 fuel price of \$2.80
2335	2335 updated with 2010 fuel price of \$2.80
2100	2100 Corrected number of forward gears to 6 from 1.....updated with 2010 fuel unit price of \$2.8
2025	2025 updated with 2010 unit fuel price of \$2.70 Diesel
2801	2801 updated with 2010 unit price of \$2.80
2801	2801 updated to 2010 unit price of \$2.80
2801	2801 updated with 2010 unit price of \$2.80
2625	2625 SC03 and Cold CO tests are from Audi R8 configuration 0 of veh 9LR8-RAQ used in Lambor
2801	2801 SC03 and Cold CO tests are from Audi R8 configuration 0 of veh 9LR8-RMQ used in Lambor
1999	1999 updated with 2010 unit price of \$2.80
1999	1999 Corrected trans code to S7 updated with 2010 unit price of \$2.80
2470	2470 updated with 2010 unit price of \$2.80
2209	2209 updated with 2010 unit price of \$2.80
2100	2100 updated with 2010 unit price of \$2.80
2625	2625 update with 2010 unit price of \$2.80
1751	1751 corrected number of forward gears to 6...updated with 2010 unit price of \$2.80
1751	1751 corrected the number of forward gears to 6...updated with 2010 unit price of \$2.80
2625	2625 SC03 and Cold CO tests are originally from worse case Audi R8 configuration 0 of veh 9LR8
2801	2801 SC03 and Cold CO tests are from Audi R8 worse case configuration 0 of veh 9LR8-RMQ. up
2625	2625 SC03 and Cold CO tests are from Audi R8 worse case configuration 0 of veh 9LR8-RAQ. cor
2999	2999 SC03 and Cold CO tests are from Audi R8 worse case configuration 0 of veh 9LR8-RMQ. Co
1680	1680 added manuf confirmatory tests for Eos 2.0SA test group.....updated with 2010 unit fuel price
1680	1680 added manuf confirmatory tests for SULEV Eos.....updated with 2010 unit fuel price of \$2.80
1554	1554 this is a double clutch transmission and it has no hydrolic torque converter with a lock-up...up
1680	1680 corrected manuf code, the manuf confirmatory tests for the Eos in the2.03SA test group w
1554	1554 this is a double clutch transmission and it has no hydrolic torque converter with a lock-up...up
1680	1680 mauf confirmatory tests added for Eos ...2.0SA test group.....updated with 2010 unit fuel price
1680	1680 CORRECTED SALES VOLUME FOR THIS CC MODEL, SECOND CORRECTION TO LIST T
1999	1999 corrected to use derived 5-cycle method for label.....updated 2010 fuel unit price of \$2.80
1999	1999 corrected to use derived 5-cycle label method.....updated 2010 fuel unit price of \$2.80
2100	2100 changed to derived 5 cycle label calculation.....updated 2010 fuel unit price of \$2.80
2025	2025 updated with 2010 unit fuel price of \$2.70 Diesel

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ghini 5 cycle labels. Transmission lock-up corrected to "no". corrected to automated manual trans, updated with 2010 fuel unit price of \$2.80

-RAQ. corrected to automated manual trans, updated with 2010 unit price of \$2.80
dated with 2010 unit price of \$2.80
corrected ETW and IW to 4000lbs corrected to automated manual trans, updated with 2010 unit price of \$2.80
corrected annual fuel cost, updated with 2010 unit price of \$2.80
e of \$2.80

date with 2010 fuel unit price of \$2.80
ere addedupdated with 2010 unit fuel price of \$2.80
date with 2010 fuel unit price of \$2.80
e of \$2.80
HE CC CARLINE CODE AS 293 NOT 291 AT DATA LEVELupdated with 2010 unit fuel price of \$2.80

Alternative Fuel	Engine Displacement	Intake Value	Exhaust Value	Carline	CI	Carline	CI	Car/Truck	Calc	Appr	Sales
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		2	2	7 Small Staticar		Vehicle Sp					(b) (4)
		2	2	7 Small Staticar		Vehicle Sp					
		2	2	7 Small Staticar		Vehicle Sp					
		2	2	4 Compact Ccar		Derived 5-i					
		2	2	7 Small Staticar		Derived 5-i					
		2	2	4 Compact Ccar		Derived 5-i					
		2	2	4 Compact Ccar		Derived 5-i					
		2	2	3 Subcompacar		Derived 5-i					
		2	2	3 Subcompacar		Derived 5-i					
		2	2	3 Subcompacar		Derived 5-i					
		2	2	3 Subcompacar		Derived 5-i					
		2	2	3 Subcompacar		Vehicle Sp					
		2	2	5 Midsize Ccar		Derived 5-i					
		2	2	8 Midsize Stcar		Vehicle Sp					
		2	2	5 Midsize Ccar		Vehicle Sp					
		2	2	5 Midsize Ccar		Derived 5-i					
		2	2	5 Midsize Ccar		Derived 5-i					
		2	2	6 Large Carscar		Derived 5-i					
		2	2	23 Special Pu		1 Vehicle Sp					
		2	2	23 Special Pu		1 Vehicle Sp					
		2	2	23 Special Pu		1 Derived 5-i					
		2	2	1 Two Seatecar		Derived 5-i					
		2	2	1 Two Seatecar		Derived 5-i					
010 fuel unit price of \$2.80		2	2	1 Two Seatecar		Vehicle Sp					
		2	2	1 Two Seatecar		Vehicle Sp					
		2	2	4 Compact Ccar		Vehicle Sp					
		2	2	4 Compact Ccar		Vehicle Sp					
		2	2	3 Subcompacar		Vehicle Sp					
		2	2	3 Subcompacar		Vehicle Sp					
		2	2	3 Subcompacar		Vehicle Sp					
		2	2	5 Midsize Ccar		Derived 5-i					
		2	2	3 Subcompacar		Vehicle Sp					
		2	2	1 Two Seatecar		Vehicle Sp					
		2	2	1 Two Seatecar		Vehicle Sp					
		2	2	1 Two Seatecar		Vehicle Sp					
		2	2	1 Two Seatecar		Vehicle Sp					
		2	2	1 Two Seatecar		Vehicle Sp					
		2	2	3 Subcompacar		Vehicle Sp					
		2	2	4 Compact Ccar		Vehicle Sp					
		2	2	4 Compact Ccar		Vehicle Sp					
		2	2	4 Compact Ccar		Vehicle Sp					
		2	2	4 Compact Ccar		Vehicle Sp					
		2	2	4 Compact Ccar		Vehicle Sp					
		2	2	4 Compact Ccar		Vehicle Sp					
		2	2	22 Special Pu		1 Derived 5-i					
		2	2	22 Special Pu		1 Derived 5-i					
		2	2	23 Special Pu		1 Derived 5-i					
		2	2	23 Special Pu		1 Vehicle Sp					

Relabel Date	DEPA FE Label Database ID	Unique Label	Rec Relabel	Relabel Date	Suppress	Police/Em	Comment
6/12/2009	1165	N	N		N	N	
6/12/2009	1166	N	N		N	N	
6/5/2009	1892	N	N		N	N	
6/3/2009	1868	N	N		N	N	
6/3/2009	1870	N	N		N	N	
6/3/2009	1874	N	N		N	N	
6/3/2009	1871	N	N		N	N	
6/3/2009	1869	N	N		N	N	
6/3/2009	1873	N	N		N	N	
6/3/2009	1876	N	N		N	N	
6/3/2009	1872	N	N		N	N	
6/22/2009	1895	N	N		N	N	
8/7/2009	2060	N	N		N	N	
6/3/2009	1888	N	N		N	N	
6/3/2009	1887	N	N		N	N	
5/29/2009	1859	N	N		N	N	
5/29/2009	1858	N	N		N	N	
5/29/2009	1857	N	N		N	N	
6/11/2009	1965	N	N		N	N	
6/22/2009	1966	N	N		N	N	TWO CHA
5/29/2009	1863	N	N		N	N	
6/2/2009	1886	N	N		N	N	
6/2/2009	1885	N	N		N	N	
6/25/2009	1866	N	N		N	N	ENGINE C
6/25/2009	1867	N	N		N	N	ENGINE C
6/3/2009	1889	N	N		N	N	
6/3/2009	1890	N	N		N	N	
6/29/2009	1862	N	N		N	N	
6/29/2009	1861	N	N		N	N	
6/3/2009	1891	N	N		N	N	
6/10/2009	1875	N	N		N	N	
6/5/2009	1893	N	N		N	N	
6/5/2009	1894	N	N		N	N	
6/25/2009	1850	N	N		N	N	ENGINE C
6/25/2009	1852	N	N		N	N	ENGINE C
6/25/2009	1851	N	N		N	N	ENGINE C
6/25/2009	1853	N	N		N	N	ENGINE C
6/18/2009	1915	N	N		N	N	
6/18/2009	1914	N	N		N	N	
6/22/2009	1909	N	N		N	N	
6/18/2009	1913	N	N		N	N	
6/22/2009	1908	N	N		N	N	
6/18/2009	1916	N	N		N	N	
6/12/2009	1905	N	N		N	N	
6/12/2009	1931	N	N		N	N	
6/12/2009	1930	N	N		N	N	
6/12/2009	1929	N	N		N	N	
6/22/2009	1967	N	N		N	N	TWO CHA

Battery Ty	Total Volt	Batt Ener	Batt Spec	Batt Char	Batt Char	# Capacit	Regen Br	Regen Br	Regen Br
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Regen BrkDriver CntFuel Cell IFuel Cell (HEV-EV C# Drive MMotor GerMotor GerMotor GerRated Mot

Mr Contact (LOW)

[illegible]

EPA com	VERIFY cc	Model Yr	Mfr Name	Division	Carline	Verify Mfr Index (Mo	Eng Displ # Cyl
Diesel; Warning - if trans type is A	2010	Volkswage	Audi	A3	VWX	76	2.0 4
Relabeled. Please include id	2010	Volkswage	Audi	Q7	VWX	62	3.6 6
Warning - if trans type is A	2010	Volkswage	Volkswage	CC	VWX	71	3.6 6
Warning - if trans type is A	2010	Volkswage	Volkswage	CC 4MOTIV	VWX	72	3.6 6
Warning - if trans type is A	2010	Volkswage	Volkswage	EOS	VWX	68	2.0 4
Diesel;	2010	Volkswage	Volkswage	GOLF	VWX	79	2.0 4
Diesel; Warning - if trans type is A	2010	Volkswage	Volkswage	GOLF	VWX	75	2.0 4
Warning - if trans type is A	2010	Volkswage	Volkswage	GOLF	VWX	28	2.5 5
	2010	Volkswage	Volkswage	GOLF	VWX	31	2.5 5
Diesel;	2010	Volkswage	Volkswage	JETTA	VWX	77	2.0 4
Diesel; Warning - if trans type is A	2010	Volkswage	Volkswage	JETTA	VWX	74	2.0 4
Warning - if trans type is A	2010	Volkswage	Volkswage	JETTA	VWX	27	2.5 5
	2010	Volkswage	Volkswage	JETTA	VWX	30	2.5 5
Diesel;	2010	Volkswage	Volkswage	JETTA SP	VWX	78	2.0 4
Diesel; Warning - if trans type is A	2010	Volkswage	Volkswage	JETTA SP	VWX	73	2.0 4
Warning - if trans type is A	2010	Volkswage	Volkswage	JETTA SP	VWX	26	2.5 5
	2010	Volkswage	Volkswage	JETTA SP	VWX	29	2.5 5
	2010	Volkswage	Volkswage	NEW BEE	VWX	67	2.5 5
Warning - if trans type is A	2010	Volkswage	Volkswage	NEW BEE	VWX	65	2.5 5
Warning - if trans type is A	2010	Volkswage	Volkswage	NEW BEE	VWX	66	2.5 5
Warning - if trans type is A	2010	Volkswage	Volkswage	PASSAT	VWX	52	2.0 4
Warning - if trans type is A	2010	Volkswage	Volkswage	PASSAT	VWX	54	2.0 4
Relabeled. Please include id	2010	Volkswage	Volkswage	TOUAREC	VWX	61	3.6 6

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd Hw	Low'd Coi	City Unad	Hwy Unad	Comb Unad
Auto(S6)	30	42	34				38.8462	60.1	46.1981
Auto(S6)	30	42	34				38.8462	60.1	46.1981
Auto(S6)	18	27	21				21.2	35.1	25.7972
Auto(S6)	17	25	20				20.5	33.5	24.8373
Auto(S6)	22	29	25				28.0251	41.3156	32.7685
Manual(M6)	30	41	34				38.7511	58.535	45.7021
Auto(S6)	30	42	34				38.8462	60.1	46.1981
Auto(A6)	23	30	26				27.2668	40.2409	31.8941
Manual(M6)	22	30	25				25.18	39.6147	30.1185
Manual(M6)	30	41	34				38.7511	58.535	45.7021
Auto(S6)	30	42	34				38.8462	60.1	46.1981
Auto(A6)	23	30	25				27.0008	40.0169	31.6305
Manual(M6)	22	30	25				24.8525	39.5714	29.8486
Manual(M6)	30	41	34				38.7511	58.535	45.7021
Auto(S6)	30	42	34				38.8462	60.1	46.1981
Auto(A6)	23	30	25				27.0008	40.0169	31.6305
Manual(M6)	22	30	25				24.8525	39.5714	29.8486
Manual(M6)	20	28	23				24.9892	39.3753	29.9061
Auto(S6)	20	29	23				25.1733	40.8	30.4155
Auto(S6)	20	28	23				24.8461	39.7267	29.8832
Auto(S6)	22	31	25				27.1189	42	32.2629
Auto(S6)	22	31	25				27.1189	42	32.2629
Auto(S6)	30	42	34				38.8462	60.1	46.1981
Auto(S6)	30	42	34				38.8462	60.1	46.1981

City and Hwy 5-Cyl Comb 5-C Guzzler?			Air Aspir	Air Aspira	Trans	Trans Des	Trans, Oth	# Gears
			TC	Turbochar	SA	Semi-Automatic		6
e)(4) reasons.]; Warning - if trans type is Automatic or Semi-automatic, Trans Lock-Up field should normally be yes.								
17.5	26.6	20.6843	NA	Naturally	SA	Semi-Automatic		6
16.9	25.2	19.8407	NA	Naturally	SA	Semi-Automatic		6
22.18	29.4583	24.9545	TC	Turbochar	SA	Semi-Automatic		6
			TC	Turbochar	M	Manual		6
			TC	Turbochar	SA	Semi-Automatic		6
22.9556	30.026	25.6764	NA	Naturally	AA	Automatic		6
21.7583	30.3987	24.9495	NA	Naturally	AM	Manual		5
			TC	Turbochar	M	Manual		6
			TC	Turbochar	SA	Semi-Automatic		6
22.69	29.757	25.4051	NA	Naturally	AA	Automatic		6
21.779	30.2556	24.9209	NA	Naturally	AM	Manual		5
			TC	Turbochar	M	Manual		6
			TC	Turbochar	SA	Semi-Automatic		6
22.69	29.757	25.4051	NA	Naturally	AA	Automatic		6
21.779	30.2556	24.9209	NA	Naturally	AM	Manual		5
			NA	Naturally	AM	Manual		5
			NA	Naturally	SA	Semi-Automatic		6
			NA	Naturally	SA	Semi-Automatic		6
21.9904	30.747	25.2229	TC	Turbochar	SA	Semi-Automatic		6
21.9904	30.747	25.2229	TC	Turbochar	SA	Semi-Automatic		6
e)(4) reasons.]; Warning - if trans type is Automatic or Semi-automatic, Trans Lock-Up field should normally be yes.								

Trans	Loc	Trans	Cre	Drive	Sys	Drive	Des	Primary	B	Max	Ethar	Max	Biodi	Range1	- IFuel	Usag	Fuel	Usag
N	N		F	2-Wheel	DAVWXV02.0U5N								5		DU		Diesel, ultr	
N	N		A	All Wheel	IAVWXT03.6U76										GP		Gasoline (l	
N	N		F	2-Wheel	DAVWXV03.6U46										GP		Gasoline (l	
N	N		A	All Wheel	IAVWXV03.6U46										GP		Gasoline (l	
N	N		F	2-Wheel	DAVWXV02.03UA										GP		Gasoline (l	
N	N		F	2-Wheel	DAVWXV02.0U5N								5		DU		Diesel, ultr	
N	N		F	2-Wheel	DAVWXV02.0U5N								5		DU		Diesel, ultr	
N	N		F	2-Wheel	DAVWXV02.5U35										G		Gasoline (l	
N	N		F	2-Wheel	DAVWXV02.5U35										G		Gasoline (l	
N	N		F	2-Wheel	DAVWXV02.0U5N								5		DU		Diesel, ultr	
N	N		F	2-Wheel	DAVWXV02.0U5N								5		DU		Diesel, ultr	
N	N		F	2-Wheel	DAVWXV02.5U35										G		Gasoline (l	
N	N		F	2-Wheel	DAVWXV02.5U35										G		Gasoline (l	
N	N		F	2-Wheel	DAVWXV02.0U5N								5		DU		Diesel, ultr	
N	N		F	2-Wheel	DAVWXV02.0U5N								5		DU		Diesel, ultr	
N	N		F	2-Wheel	DAVWXV02.5U35										G		Gasoline (l	
N	N		F	2-Wheel	DAVWXV02.5U35										G		Gasoline (l	
N	N		F	2-Wheel	DAVWXV02.5253										G		Gasoline (l	
N	N		F	2-Wheel	DAVWXV02.5253										G		Gasoline (l	
N	N		F	2-Wheel	DAVWXV02.5253										G		Gasoline (l	
N	N		F	2-Wheel	DAVWXV02.03UA										GP		Gasoline (l	
N	N		F	2-Wheel	DAVWXV02.03UA										GP		Gasoline (l	
N	N		A	All Wheel	IAVWXT03.6U76										GP		Gasoline (l	

Annual Fuel Economy (EPA Calc)	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Low'd City Low'd Hw Low'd CorCity2 Unadjusted)
1191	1191 updated with 2010 units price of \$2.70 Diesel	
2625	2625updated 2010 fuel unit price of \$2.80...RELABEL AFTER EPA CONFIRMATORY TEST	
1999	1999 ..update to 2010 fuel unit price of \$2.80	
2100	2100 ..update to 2010 fuel unit price of \$2.80	
1680	1680 this is a double clutch transmission and it has no torque converter with a lock-up.....updated w	
1191	1191 updated with 2010 fuel unit price of \$2.70 Diesel	
1191	1191 updated with 2010 units price of \$2.70 Diesel	
1502	1502 CORRECTED MODEL TYPE FE AND ANNUAL FUEL COST FOR THIS GOLF ..update to 2	
1560	1560 ..update to 2010 fuel unit price of \$2.60	
1191	1191 updated with 2010 fuel unit price of \$2.70 Diesel	
1191	1191 updated with 2010 units price of \$2.70 Diesel	
1560	1560 ..update to 2010 fuel unit price of \$2.60	
1560	1560 ..update to 2010 fuel unit price of \$2.60	
1191	1191 updated with 2010 fuel unit price of \$2.70 Diesel	
1191	1191 updated with 2010 units price of \$2.70 Diesel	
1560	1560 ..update to 2010 fuel unit price of \$2.60	
1560	1560 ..update to 2010 fuel unit price of \$2.60	
1696	1696 updated with 2010 fuel unit price of \$2.60	
1696	1696 updated with 2010 unit price for regular at \$2.60	
1696	1696 updated with 2010 fuel unit price of \$2.60	
1680	1680 CORRECTED DATA SUB TO NO SUB FOR ALL TESTS,updated with 2010 unit fuel price	
1680	1680updated with 2010 unit fuel price of \$2.80	
2625	2625updated 2010 fuel unit price of \$2.80.....RELABEL AFTER EPA CONFIRMATO	

2010 Fuel Unit Price of \$2.80
2010 Fuel Unit Price of \$2.60

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010 fuel unit prcie of \$2.60

e of \$2.80

RY TESTING

Alternative Fuel	Engine Displacement	Intake Valve	Exhaust Valve	Carline	CI	Carline	CI	Car/Truck	Calc	Appr	Sales
Under EPA	2	2	2	7 Small Staticar		Derived 5-i					(b) (4)
				23 Special Pu	1	Derived 5-i					
				4 Compact Ccar		Vehicle Sp					
				4 Compact Ccar		Vehicle Sp					
				3 Subcompacar		Vehicle Sp					
				4 Compact Ccar		Derived 5-i					
				4 Compact Ccar		Derived 5-i					
				4 Compact Ccar		Vehicle Sp					
				4 Compact Ccar		Vehicle Sp					
				4 Compact Ccar		Derived 5-i					
				4 Compact Ccar		Derived 5-i					
				4 Compact Ccar		Vehicle Sp					
				4 Compact Ccar		Vehicle Sp					
				7 Small Staticar		Derived 5-i					
				7 Small Staticar		Derived 5-i					
				7 Small Staticar		Vehicle Sp					
				7 Small Staticar		Vehicle Sp					
				3 Subcompacar		Derived 5-i					
				3 Subcompacar		Derived 5-i					
				2 Minicompacar		Derived 5-i					
				5 Midsize Ccar		Vehicle Sp					
				8 Midsize Stcar		Vehicle Sp					
				Under EPA	2	2	23 Special Pu	1	Derived 5-i		

Under EPA

Under EPA

Relabel Date	FE Label Dataset ID	Unique Label Rec	Relabel	Relabel D	Suppress	Police/Em	Comment
7/22/2009	1896	N	N	N	N	N	
8/20/2009	1892	N	N	N	N	N	values were 283 14 MPG city, 20 MPG highway, and 16 MPG combined
7/22/2009	1926	N	N	N	N	N	
7/22/2009	1927	N	N	N	N	N	
7/22/2009	1906	N	N	N	N	N	
7/22/2009	1902	N	N	N	N	N	
7/22/2009	1897	N	N	N	N	N	
6/18/2009	1922	N	N	N	N	N	
6/18/2009	1925	N	N	N	N	N	
7/22/2009	1900	N	N	N	N	N	
7/22/2009	1898	N	N	N	N	N	
6/18/2009	1921	N	N	N	N	N	
6/18/2009	1924	N	N	N	N	N	
7/22/2009	1901	N	N	N	N	N	
7/22/2009	1899	N	N	N	N	N	
6/18/2009	1920	N	N	N	N	N	
6/18/2009	1923	N	N	N	N	N	
7/22/2009	1918	N	N	N	N	N	
7/22/2009	1917	N	N	N	N	N	
7/22/2009	1919	N	N	N	N	N	
6/12/2009	1903	N	N	N	N	N	
6/12/2009	1904	N	N	N	N	N	
8/20/2009	1893	N	N	N	N	N	values were 283 14 MPG city, 20 MPG highway, and 16 MPG combined

Eng Cntr	Cyl Deact	Var Valve	Var Valve	Var Valve	Var Valve	Var Valve	Energy St	Energy St	# Batterie	Battery Ty
N		N				N				
N		Y		INTAKE/E	N					
N		Y		INTAKE/E	N					
N		Y		INTAKE/E	N					
N		Y		CONTINU	N					
N		N				N				
N		N				N				
N		Y		INLET CON	N					
N		Y		INLET CON	N					
N		N				N				
N		N				N				
N		Y		INLET CON	N					
N		Y		INLET CON	N					
N		N				N				
N		N				N				
N		Y		INLET CON	N					
N		Y		INLET CON	N					
N		Y		INLET CON	N					
N		Y		INLET CON	N					
N		Y		INLET CON	N					
N		Y		CONTINU	N					
N		Y		CONTINU	N					
N		Y		INTAKE/E	N					

Battery Ty	Total Volt	Batt Ener	Batt Spec	Batt Char	Comment	#	Capacit	Regen Br	Regen Br	Regen Br
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JUSTING	ROTATION	ANGLE								
LY ADJUSTING	ROTATION	ANGLE								
LY ADJUSTING	ROTATION	ANGLE								

JUSTING	ROTATION	ANGLE								
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Contact E	Contact Phone
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[illegible]

EPA comn	VERIFY cc	Model Yr	Mfr Name	Division	Carline	Verify Mfr Index (Mo	Eng Displ	# Cyl	
Annual fueY		2010	Audi	Audi	A3	ADX	46	2.0	4
Warning - Y		2010	Audi	Audi	A3	ADX	47	2.0	4
Warning - if trans type is A		2010	Audi	Audi	A3 QUATT	ADX	43	2.0	4
		2010	Audi	Audi	A4	ADX	18	2.0	4
		2010	Audi	Audi	A4 AVANT	ADX	20	2.0	4
		2010	Audi	Audi	A4 QUATT	ADX	24	2.0	4
		2010	Audi	Audi	A4 QUATT	ADX	21	2.0	4
		2010	Audi	Audi	A5 Cabriol	ADX	19	2.0	4
		2010	Audi	Audi	A5 Cabriol	ADX	23	2.0	4
		2010	Audi	Audi	A5 QUATT	ADX	25	2.0	4
		2010	Audi	Audi	A5 QUATT	ADX	22	2.0	4
Warning - if trans type is A		2010	Audi	Audi	A5 QUATT	ADX	60	3.2	6
		2010	Audi	Audi	A6	ADX	59	3.2	6
		2010	Audi	Audi	A6 AVANT	ADX	35	3.0	6
		2010	Audi	Audi	A6 QUATT	ADX	34	3.0	6
		2010	Audi	Audi	A6 QUATT	ADX	8	4.2	8
		2010	Audi	Audi	A8	ADX	7	4.2	8
		2010	Audi	Audi	A8 L	ADX	6	4.2	8
Warning - if trans type is A		2010	Audi	Audi	Q5	ADX	48	3.2	6
Diesel; Warning - if trans type is A		2010	Audi	Audi	Q7	ADX	63	3.0	6
		2010	Audi	Audi	Q7	ADX	11	4.2	8
		2010	Audi	Audi	R8	ADX	33	4.2	8
		2010	Audi	Audi	R8	ADX	32	4.2	8
Warning - if trans type is A		2010	Audi	Audi	R8	ADX	16	5.2	10
		2010	Audi	Audi	R8	ADX	17	5.2	10
		2010	Audi	Audi	S4	ADX	36	3.0	6
Warning - if trans type is A		2010	Audi	Audi	S4	ADX	37	3.0	6
		2010	Audi	Audi	S5	ADX	10	4.2	8
		2010	Audi	Audi	S5	ADX	9	4.2	8
Warning - if trans type is A		2010	Audi	Audi	S5 Cabriol	ADX	38	3.0	6
Warning - if trans type is A		2010	Audi	Audi	S6	ADX	42	5.2	10
Warning - if trans type is A		2010	Audi	Audi	TT COUPE	ADX	44	2.0	4
Warning - if trans type is A		2010	Audi	Audi	TT ROAD	ADX	45	2.0	4
		2010	Audi	Lamborghini	Gallardo	CADX	12	5.2	10
		2010	Audi	Lamborghini	Gallardo	CADX	14	5.2	10
Warning - if trans type is A		2010	Audi	Lamborghini	Gallardo	SADX	13	5.2	10
		2010	Audi	Lamborghini	Gallardo	SADX	15	5.2	10
		2010	Audi	Volkswage	EOS	ADX	57	2.0	4
		2010	Audi	Volkswage	GTI	ADX	56	2.0	4
Warning - if trans type is A		2010	Audi	Volkswage	GTI	ADX	70	2.0	4
		2010	Audi	Volkswage	JETTA	ADX	55	2.0	4
Warning - if trans type is A		2010	Audi	Volkswage	JETTA	ADX	69	2.0	4
		2010	Audi	Volkswage	PASSAT	CADX	58	2.0	4
Warning - if trans type is A		2010	Audi	Volkswage	PASSAT	CADX	53	2.0	4
		2010	Audi	Volkswage	TIGUAN	ADX	51	2.0	4
Warning - if trans type is A		2010	Audi	Volkswage	TIGUAN	ADX	50	2.0	4
Warning - if trans type is A		2010	Audi	Volkswage	TIGUAN 4	ADX	49	2.0	4
Diesel; Warning - if trans type is A		2010	Audi	Volkswage	Touareg	ADX	64	3.0	6

Trans as I	City FE (G	Hwy FE (C	Comb FE	Low'd City	Low'd Hw	Low'd Cor	City Unad	Hwy Unad	Comb Unad
Manual(S6)	21	28	24	25.2906	40.4003	30.4083			
Auto(S6)	21	28	24	27.2	37.1	30.9119			
Auto(AV)	23	30	26	29.2373	42.7743	34.0926			
Auto(S6)	21	27	23	25.9563	37.7989	30.2164			
Manual(M6)	22	30	25	27.6402	42.575	32.8212			
Auto(S6)	21	27	23	25.9563	37.7989	30.2164			
Auto(AV)	23	30	26	29.2373	42.7743	34.0926			
Auto(S6)	20	26	23	25.9	37	29.9422			
Manual(M6)	22	30	25	27.6402	42.575	32.8212			
Auto(S6)	21	27	23	25.9563	37.7989	30.2164			
Auto(S6)	18	27	21	22.6	36.2	27.1981			
Auto(AV)	18	28	22	23	38.9	28.184			
Auto(S6)	18	26	21	21.7553	34.7286	26.1514			
Auto(S6)	18	26	21	21.7553	34.7286	26.1514			
Auto(S6)	16	23	18	19.8911	31.5002	23.8458			
Auto(S6)	16	23	18	19.8911	31.5002	23.8458			
Auto(S6)	16	23	18	19.8911	31.5002	23.8458			
Auto(S6)	18	23	20	22.7	30.7	25.7155			
Auto(S6)	17	25	20	19.8	33.2	24.1943			
Auto(S6)	13	18	15	16.2	24.6	19.1412			
Manual(M6)	12	19	15	15.3	26.8	18.9614			
Auto(S6)	13	18	15	15.4	25.0451	18.6283			
Auto(AM6)	13	20	16	15.8	24.8	18.8839			
Manual(M6)	12	20	15	13.7	23.9	16.9565			
Manual(M6)	18	27	21	21.5	34.1	25.7879			
Auto(S7)	18	28	21	21.6	35	26.096			
Manual(M6)	14	22	17	17.3	29.3	21.2088			
Auto(S6)	16	24	19	20.4	31	24.1098			
Auto(S7)	17	26	20	20.3	34	24.7961			
Auto(S6)	14	19	16	17.2	26.7	20.4789			
Auto(S6)	21	29	24	27.5267	39.7256	31.9404			
Auto(S6)	21	29	24	27.5267	39.7256	31.9404			
Auto(AM6)	14	20	16	16.1	25.4	19.276			
Manual(M6)	12	20	15	14	24	17.2308			
Auto(AM6)	13	20	16	16	25.4	19.197			
Manual(M6)	12	20	14	13	22.6	16.0722			
Manual(M6)	21	31	25	26.0803	41.521	31.3218			
Manual(M6)	21	31	25	26.0803	41.521	31.3218			
Auto(S6)	24	32	27	29.8294	43.5414	34.7546			
Manual(M6)	21	31	25	26.0803	41.521	31.3218			
Auto(S6)	24	32	27	29.8294	43.5414	34.7546			
Manual(M6)	21	31	25	26.0803	41.521	31.3218			
Auto(S6)	22	31	25	27.1189	42	32.2629			
Manual(M6)	19	26	21	23.3	36.2	27.75			
Auto(S6)	18	24	21	22.9	34.1	26.8716			
Auto(S6)	18	24	20	22.5	33.3	26.3449			
Auto(S6)	18	25	20	21.9	34.4	26.1811			

City	Engine	5-09	Comb 5-C	Guzzler?	Air Aspir	Air Aspir	Trans	Trans Des	Trans, Ott	# Gears
6; Please revise/clarify; 20.9	20.7906	30	24.123		TC	Turbochar	M	Manual		6
	21.6629	27.7215	23.9585		TC	Turbochar	SA	Semi-Automatic		6
	20.9	28.1	23.6239		TC	Turbochar	SA	Semi-Automatic		6
					TC	Turbochar	CVT	Continuously Variable		1
					TC	Turbochar	SA	Semi-Automatic		6
					TC	Turbochar	M	Manual		6
					TC	Turbochar	SA	Semi-Automatic		6
					TC	Turbochar	CVT	Continuously Variable		1
					TC	Turbochar	SA	Semi-Automatic		6
					TC	Turbochar	M	Manual		6
					TC	Turbochar	SA	Semi-Automatic		6
	18.2	27.2	21.384		NA	Naturally	ASA	Semi-Automatic		6
					NA	Naturally	ACVT	Continuously Variable		1
	17.6	25.9	20.6407		SC	Superchar	SA	Semi-Automatic		6
	17.6	25.9	20.6407		SC	Superchar	SA	Semi-Automatic		6
					NA	Naturally	ASA	Semi-Automatic		6
				NA	Naturally	ASA	Semi-Automatic		6	
				NA	Naturally	ASA	Semi-Automatic		6	
17.8	22.9	19.7826		NA	Naturally	ASA	Semi-Automatic		6	
16.6	24.8	19.5017		TC	Turbochar	SA	Semi-Automatic		6	
				NA	Naturally	ASA	Semi-Automatic		6	
			G	NA	Naturally	AM	Manual		6	
			G	NA	Naturally	ASA	Semi-Automatic		6	
13.3	19.5	15.5206	G	NA	Naturally	AM	Automated Manual		6	
11.9	19.9	14.5282	G	NA	Naturally	AM	Manual		6	
17.8	26.7	20.9412		SC	Superchar	M	Manual		6	
17.7	27.8	21.1593		SC	Superchar	SA	Semi-Automatic		7	
14.3	21.9	16.9464	G	NA	Naturally	AM	Manual		6	
16.5	24.2	19.2573		NA	Naturally	ASA	Semi-Automatic		6	
16.7	26.1	19.93		SC	Superchar	SA	Semi-Automatic		7	
			G	NA	Naturally	ASA	Semi-Automatic		6	
21.2766	29.052	24.1899		TC	Turbochar	SA	Semi-Automatic		6	
21.2766	29.052	24.1899		TC	Turbochar	SA	Semi-Automatic		6	
13.5	19.8	15.756	G	NA	Naturally	AM	Automated Manual		6	
12.1	20	14.7157	G	NA	Naturally	AM	Manual		6	
13.4	19.8	15.6809	G	NA	Naturally	AM	Automated Manual		6	
11.5	19.5	14.1038	G	NA	Naturally	AM	Manual		6	
21.101	30.8701	24.6049		TC	Turbochar	M	Manual		6	
21.101	30.8701	24.6049		TC	Turbochar	M	Manual		6	
24.0933	32.4086	27.2382		TC	Turbochar	SA	Semi-Automatic		6	
21.101	30.8701	24.6049		TC	Turbochar	M	Manual		6	
24.0933	32.4086	27.2382		TC	Turbochar	SA	Semi-Automatic		6	
21.101	30.8701	24.6049		TC	Turbochar	M	Manual		6	
21.9904	30.747	25.2229		TC	Turbochar	SA	Semi-Automatic		6	
				TC	Turbochar	M	Manual		6	
				TC	Turbochar	SA	Semi-Automatic		6	
				TC	Turbochar	SA	Semi-Automatic		6	
17.8	24.6	20.3287		TC	Turbochar	SA	Semi-Automatic		6	

Trans	Loc	Trans	Cre	Drive	Sys	Drive	Des	Primary	B	Max	Ethar	Max	Biodi	Range1	- IFuel	Usag	Fuel	Usag
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UB								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV02.03UB								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV02.03UB								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV02.03UB								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UB								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV02.03UB								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV02.03UB								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV02.03UB								GP		Gasoline	(I
N		N		A		All Wheel	IAADXJ03.23UC								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXJ03.23UC								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV03.03UF								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV03.03UF								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV04.2365								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV04.2365								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV04.2365								GP		Gasoline	(I
N		N		A		All Wheel	IAADXJ03.23UC								GP		Gasoline	(I
N		N		A		All Wheel	IAADXT03.03LD						5		DU		Diesel, ultr	
Y		N		A		All Wheel	IAADXT04.23UD								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV04.2375								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV04.2375								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV05.2LR8								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV05.2LR8								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV03.03UF								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV03.03UF								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV04.2365								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV04.2365								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV03.03UF								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV05.2385								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV02.03UA								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV02.03UA								GP		Gasoline	(I
Y		N		A		All Wheel	IAADXV05.2LR8								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV05.2LR8								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV05.2LR8								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV05.2LR8								GP		Gasoline	(I
N		N		F		2-Wheel	DAVWXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		F		2-Wheel	DAADXV02.03UA								GP		Gasoline	(I
N		N		A		All Wheel	IAADXV02.03UA								GP		Gasoline	(I
N		N		A		All Wheel	IAADXT03.03LD						5		DU		Diesel, ultr	

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Annual Fuel Economy	EPA Calculation	Comment	City2 FE (Hwy2 Fuel Comb2 Fuel Low'd City Low'd Hwy Low'd City2 Unadjusted)
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1314	1751		
1314	1751		
1751	1751	corrected number of forward gears to 6...updated with 2010 unit price of \$2.80	
1617	1617	updated to 2010 unit price of \$2.80	
1827	1827	update with 2010 unit price of \$2.80	
1680	1680	update with 2010 unit price of \$2.80	
1827	1827	update with 2010 unit price of \$2.80	
1617	1617	updated to 2010 unit price of \$2.80	
1827	1827	update with 2010 unit price of \$2.80	
1680	1680	update with 2010 unit price of \$2.80	
1827	1827	update with 2010 unit price of \$2.80	
1999	1999	updated with 2010 unit price of \$2.80	
1911	1911		
1999	1999	updated with 2010 unit price of \$2.80	
1999	1999	updated with 2010 unit price of \$2.80	
2335	2335	updated with 2010 fuel price of \$2.80	
2335	2335	updated with 2010 fuel price of \$2.80	
2335	2335	updated with 2010 fuel price of \$2.80	
2100	2100	Corrected number of forward gears to 6 from 1.....updated with 2010 fuel unit price of \$2.8	
2025	2025	updated with 2010 unit fuel price of \$2.70 Diesel	
2801	2801	updated with 2010 unit price of \$2.80	
2801	2801	updated to 2010 unit price of \$2.80	
2801	2801	updated with 2010 unit price of \$2.80	
2625	2625	SC03 and Cold CO tests are from Audi R8 configuration 0 of veh 9LR8-RAQ used in Lambor	
2801	2801	SC03 and Cold CO tests are from Audi R8 configuration 0 of veh 9LR8-RMQ used in Lambor	
1999	1999	updated with 2010 unit price of \$2.80	
1999	1999	Corrected trans code to S7 updated with 2010 unit price of \$2.80	
2470	2470	updated with 2010 unit price of \$2.80	
2209	2209	updated with 2010 unit price of \$2.80	
2100	2100	updated with 2010 unit price of \$2.80	
2625	2625	update with 2010 unit price of \$2.80	
1751	1751	corrected number of forward gears to 6...updated with 2010 unit price of \$2.80	
1751	1751	corrected the number of forward gears to 6...updated with 2010 unit price of \$2.80	
2625	2625	SC03 and Cold CO tests are originally from worse case Audi R8 configuration 0 of veh 9LR8	
2801	2801	SC03 and Cold CO tests are from Audi R8 worse case configuration 0 of veh 9LR8-RMQ. up	
2625	2625	SC03 and Cold CO tests are from Audi R8 worse case configuration 0 of veh 9LR8-RAQ. cor	
2999	2999	SC03 and Cold CO tests are from Audi R8 worse case configuration 0 of veh 9LR8-RMQ. Co	
1680	1680	added manuf confirmatory tests for Eos 2.0SA test group.....updated with 2010 unit fuel pric	
1680	1680	added manuf confirmatory tests for SULEV Eos.....updated with 2010 unit fuel price of \$2.80	
1554	1554	this is a double clutch transmission and it has no hydrolic torque converter with a lock-up...up	
1680	1680	corrected manuf code, the manuf confirmatory tests for the Eos in the2.03SA test group w	
1554	1554	this is a double clutch transmission and it has no hydrolic torque converter with a lock-up...up	
1680	1680	mauf confirmatory tests added for Eos ...2.0SA test group.....updated with 2010 unit fuel pric	
1680	1680	CORRECTED SALES VOLUME FOR THIS CC MODEL, SECOND CORRECTION TO LIST T	
1999	1999	corrected to use derived 5-cycle method for label.....updated 2010 fuel unit price of \$2.80	
1999	1999	corrected to use derived 5-cycle label method.....updated 2010 fuel unit price of \$2.80	
2100	2100	changed to derived 5 cycle label calculation.....updated 2010 fuel unit price of \$2.80	
2025	2025	updated with 2010 unit fuel price of \$2.70 Diesel	

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ghini 5 cycle labels. Transmission lock-up corrected to "no". corrected to automated manual trans, updated with 2010 fuel unit price of \$2.80

-RAQ. corrected to automated manual trans, updated with 2010 unit price of \$2.80
dated with 2010 unit price of \$2.80
corrected ETW and IW to 4000lbs corrected to automated manual trans, updated with 2010 unit price of \$2.80
corrected annual fuel cost, updated with 2010 unit price of \$2.80
e of \$2.80

date with 2010 fuel unit price of \$2.80
ere addedupdated with 2010 unit fuel price of \$2.80
date with 2010 fuel unit price of \$2.80
e of \$2.80
HE CC CARLINE CODE AS 293 NOT 291 AT DATA LEVELupdated with 2010 unit fuel price of \$2.80

Alternative Fuel	Engine Displacement	Intake Volume	Exhaust Volume	Carline	CI	Carline	CI	Car/Truck	Calc	Appr	Sales
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	2	2	7	Small Staticar		Vehicle Sp					(b) (4)
	2	2	7	Small Staticar		Vehicle Sp					
	2	2	7	Small Staticar		Vehicle Sp					
	2	2	4	Compact Ccar		Derived 5-i					
	2	2	7	Small Staticar		Derived 5-i					
	2	2	4	Compact Ccar		Derived 5-i					
	2	2	4	Compact Ccar		Derived 5-i					
	2	2	3	Subcompacar		Derived 5-i					
	2	2	3	Subcompacar		Derived 5-i					
	2	2	3	Subcompacar		Derived 5-i					
	2	2	3	Subcompacar		Derived 5-i					
	2	2	3	Subcompacar		Vehicle Sp					
	2	2	5	Midsize Ccar		Derived 5-i					
	2	2	8	Midsize Stcar		Vehicle Sp					
	2	2	5	Midsize Ccar		Vehicle Sp					
	2	2	5	Midsize Ccar		Derived 5-i					
	2	2	5	Midsize Ccar		Derived 5-i					
	2	2	6	Large Carscar		Derived 5-i					
	2	2	23	Special Pu		1 Vehicle Sp					
	2	2	23	Special Pu		1 Vehicle Sp					
	2	2	23	Special Pu		1 Derived 5-i					
	2	2	1	Two Seatecar		Derived 5-i					
	2	2	1	Two Seatecar		Derived 5-i					
010 fuel unit price of \$2.80	2	2	1	Two Seatecar		Vehicle Sp					
	2	2	1	Two Seatecar		Vehicle Sp					
	2	2	4	Compact Ccar		Vehicle Sp					
	2	2	4	Compact Ccar		Vehicle Sp					
	2	2	3	Subcompacar		Vehicle Sp					
	2	2	3	Subcompacar		Vehicle Sp					
	2	2	3	Subcompacar		Vehicle Sp					
	2	2	5	Midsize Ccar		Derived 5-i					
	2	2	3	Subcompacar		Vehicle Sp					
	2	2	1	Two Seatecar		Vehicle Sp					
	2	2	1	Two Seatecar		Vehicle Sp					
	2	2	1	Two Seatecar		Vehicle Sp					
	2	2	1	Two Seatecar		Vehicle Sp					
	2	2	1	Two Seatecar		Vehicle Sp					
	2	2	3	Subcompacar		Vehicle Sp					
	2	2	4	Compact Ccar		Vehicle Sp					
	2	2	4	Compact Ccar		Vehicle Sp					
	2	2	4	Compact Ccar		Vehicle Sp					
	2	2	4	Compact Ccar		Vehicle Sp					
	2	2	4	Compact Ccar		Vehicle Sp					
	2	2	22	Special Pu		1 Derived 5-i					
	2	2	22	Special Pu		1 Derived 5-i					
	2	2	23	Special Pu		1 Derived 5-i					
	2	2	23	Special Pu		1 Vehicle Sp					

Relabel Date	DEPA FE Label Dataset ID	Unique Label Rec	Relabel	Relabel Date	Suppress	Police/Em	Comment
6/12/2009	1165	N	N		N	N	
6/12/2009	1166	N	N		N	N	
6/5/2009	1892	N	N		N	N	
6/3/2009	1868	N	N		N	N	
6/3/2009	1870	N	N		N	N	
6/3/2009	1874	N	N		N	N	
6/3/2009	1871	N	N		N	N	
6/3/2009	1869	N	N		N	N	
6/3/2009	1873	N	N		N	N	
6/3/2009	1876	N	N		N	N	
6/3/2009	1872	N	N		N	N	
6/22/2009	1895	N	N		N	N	
8/7/2009	2060	N	N		N	N	
6/3/2009	1888	N	N		N	N	
6/3/2009	1887	N	N		N	N	
5/29/2009	1859	N	N		N	N	
5/29/2009	1858	N	N		N	N	
5/29/2009	1857	N	N		N	N	
6/11/2009	1965	N	N		N	N	
6/22/2009	1966	N	N		N	N	TWO CHA
5/29/2009	1863	N	N		N	N	
6/2/2009	1886	N	N		N	N	
6/2/2009	1885	N	N		N	N	
6/25/2009	1866	N	N		N	N	ENGINE C
6/25/2009	1867	N	N		N	N	ENGINE C
6/3/2009	1889	N	N		N	N	
6/3/2009	1890	N	N		N	N	
6/29/2009	1862	N	N		N	N	
6/29/2009	1861	N	N		N	N	
6/3/2009	1891	N	N		N	N	
6/10/2009	1875	N	N		N	N	
6/5/2009	1893	N	N		N	N	
6/5/2009	1894	N	N		N	N	
6/25/2009	1850	N	N		N	N	ENGINE C
6/25/2009	1852	N	N		N	N	ENGINE C
6/25/2009	1851	N	N		N	N	ENGINE C
6/25/2009	1853	N	N		N	N	ENGINE C
6/18/2009	1915	N	N		N	N	
6/18/2009	1914	N	N		N	N	
6/22/2009	1909	N	N		N	N	
6/18/2009	1913	N	N		N	N	
6/22/2009	1908	N	N		N	N	
6/18/2009	1916	N	N		N	N	
6/12/2009	1905	N	N		N	N	
6/12/2009	1931	N	N		N	N	
6/12/2009	1930	N	N		N	N	
6/12/2009	1929	N	N		N	N	
6/22/2009	1967	N	N		N	N	TWO CHA

2017-FFP 000821

Battery Ty	Total Volt	Batt Ener	Batt Spec	Batt Char	Comment	# Capacit	Regen Br	Regen Br	Regen Br
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[illegible]

[illegible]

To: "Hart, Robert (VWoA)" [Robert.Hart@vw.com]
Cc: CN=Vincent Mazaitis/OU=AA/O=USEPA/C=US@EPA[]
Bcc: []
From: CN=Jim Snyder/OU=AA/O=USEPA/C=US
Sent: Mon 8/31/2009 3:09:46 PM
Subject: RE: testing status

It looks like I was too optimistic. They are still working on it this morning. But they might get cell 5 running. Bottom line, still don't know when it will get scheduled.

Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

From: "Hart, Robert (VWoA)" <Robert.Hart@vw.com>
To: Jim Snyder/AA/USEPA/US@EPA
Cc: Vincent Mazaitis/AA/USEPA/US@EPA
Date: 08/28/2009 04:07 PM
Subject: RE: testing status

Hello Jim,

Thanks for the update. Please let me know as soon as they reschedule the CC.

Have a great weekend!

Bob Hart

From: Snyder.Jim@epamail.epa.gov [mailto:Snyder.Jim@epamail.epa.gov]
Sent: Friday, August 28, 2009 9:41 AM
To: Hart, Robert (VWoA)
Cc: Mazaitis.Vincent@epamail.epa.gov
Subject: testing status

I walked over to the lab, Looks like they fixed the problems in the cell and are checking it out right now. But nothing is prepped for today. I think we'll be up and running stuff monday. Don't know when the CC will run yet.

Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

To: CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;healy.stephen@epa.gov;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Joel
Ball/OU=AA/O=USEPA/C=US@EPA; Ex. 7 ealy.stephen@epa.gov;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Joel
Ball/OU=AA/O=USEPA/C=US@EPA; Ex. 7 N=Jim
Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Joel
Ball/OU=AA/O=USEPA/C=US@EPA; Ex. 7 N=Joel
Ball/OU=AA/O=USEPA/C=US@EPA; Ex. 7
Cc: CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA[]
From: CN=David Good/OU=AA/O=USEPA/C=US
Sent: Mon 9/21/2009 8:10:13 PM
Subject: VW - Hybrid & MSAT issues

To: CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;healy.stephen@epa.gov;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com[]; ealy.stephen@epa.gov;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com[]; N=Joel Ball/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com[]; eonard.Kata@vw.com[]
Cc: CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA[]
From: CN=David Good/OU=AA/O=USEPA/C=US
Sent: Mon 9/21/2009 8:10:13 PM
Subject: Invitation: VW - Hybrid & MSAT issues (Sep 24 02:30 PM EDT in AA-601D/AA-OTAQ-LAB@EPA)

To: CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;healy.stephen@epa.gov;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com[]; ealy.stephen@epa.gov;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com[]; N=Joel Ball/OU=AA/O=USEPA/C=US@EPA;Leonard.Kata@vw.com[]; eonard.Kata@vw.com[]
Cc: CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA[]
From: CN=David Good/OU=AA/O=USEPA/C=US
Sent: Mon 9/21/2009 8:10:13 PM
Subject: VW - Hybrid & MSAT issues

To: leonard.kata@vw.com[]
Cc: CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;juergen.peter@volkswagen.de;leonard.kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;juergen.peter@volkswagen.de;leonard.kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Joel Ball/OU=AA/O=USEPA/C=US@EPA;juergen.peter@volkswagen.de;leonard.kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; uergen.peter@volkswagen.de;leonard.kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; eonard.kata@vw.com;CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;Lothar.Rech@AUDI.DE;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; othar.Rech@AUDI.DE;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]; N=Tom Anderson/OU=AA/O=USEPA/C=US@EPA[]
From: CN=David Good/OU=AA/O=USEPA/C=US
Sent: Thur 9/24/2009 1:28:53 PM
Subject: Re: IRS tax credit for hybrids, diesels, etc
MSAT Vehicle Provisions Summary FINAL RULE.508.pdf

Len,

Here's some additional information on the IRS tax credit for hybrids, diesels, etc. I'm sure you know how to apply for the tax credit (since VW diesel vehicles are entitled to a credit) but just in case.....

I would recommend starting with the two following web pages for additional information, guidance, links to forms, list of eligible vehicles, etc:

<http://www.irs.gov/newsroom/article/0,,id=157632,00.html>

<http://www.irs.gov/newsroom/article/0,,id=157557,00.html>

Beyond that, John could try contacting Dan Orsini in the IRS Detroit Office at 313-234-2182. He was the program contact years ago but I haven't been actively involved in this in quite some time so I can't guarantee that Dan is still there or the point of contact.

Hope that helps.

From: David Good/AA/USEPA/US
To: leonard.kata@vw.com, Lothar.Rech@AUDI.DE, juergen.peter@volkswagen.de

Cc: Linc Wehrly/AA/USEPA/US@EPA, Chris Nevers/AA/USEPA/US@EPA, Stephen Healy/AA/USEPA/US@EPA, Joel Ball/AA/USEPA/US@EPA, Jim Snyder/AA/USEPA/US@EPA, Tom Anderson/AA/USEPA/US@EPA
Date: 09/24/2009 08:39 AM
Subject: MSAT - phase-in of cold NMHC standards

Len & all,

Attached is my summary of the MSAT rule. This should help answer your questions about the phase-in requirements of the cold NMHC standards.

[I think this summary is accurate reflection of the regulations, but of course, the regulations take precedent if this summary doesn't agree with the regulations.]

Please resend the handouts as they didn't come thru when you accepted the meeting in Lotus Notes.

Dave

**FINAL RULE:
CONTROL OF HAZARDOUS AIR POLLUTANTS
FROM MOBILE SOURCES**

February, 2007, revised 12/20/07, 5/13/08

Summary of Vehicle-Related Provisions

DRAFT SUMMARY – REGULATIONS TAKE PRECEDENCE

1. Cold Temperature Exhaust Emissions

Standard and Phase-in

Weight Category (GVWR)	Cert./In-Use Fleet Avg NMHC (g/mi)	Phase-In: Percentage of Vehicles by Model Year							
		2008	2009	2010	2011	2012	2013	2014	2015
LDVs & LLDTs ($\leq 6,000$ lbs)	0.3	Opt.	Opt.	25	50	75	100	100	100
HLDTs ($>6,000$ - $8,500$ lbs) & MDPVs ($>8,500$ - $10,000$ lbs)	0.5	NA	NA	Opt.	Opt.	25	50	75	100

Standard: 86.1811-09(a)(5), 86.1811-10(g)(2), 86.1864-10(a) and (e).

Phase-in: 86.1811-10(g)(2)(iii) and (g)(3), 86.1864-10(f).

Alternate Phase-In

Weight Category	Alternate Phase-In Equation
LDV/LLDT	$(6 \times \text{API}_{2008}) + (5 \times \text{API}_{2009}) + (4 \times \text{API}_{2010}) + (3 \times \text{API}_{2011}) + (2 \times \text{API}_{2012}) + (1 \times \text{API}_{2013}) \geq 500\%$, sum of first three products $\geq 100\%$ (i.e., “early year provision”)
HLDT/MDPV	$(6 \times \text{API}_{2010}) + (5 \times \text{API}_{2011}) + (4 \times \text{API}_{2012}) + (3 \times \text{API}_{2013}) + (2 \times \text{API}_{2014}) + (1 \times \text{API}_{2015}) \geq 500\%$, sum of first three products $\geq 100\%$ (i.e., “early year provision”) -or- $(6 \times \text{API}_{2010}) + (5 \times \text{API}_{2011}) + (4 \times \text{API}_{2012}) + (3 \times \text{API}_{2013}) + (2 \times \text{API}_{2014}) + (1 \times \text{API}_{2015}) \geq 600\%$, no early year provision

Alternative Phase-In: 86.1811-10(g)(4).

API = anticipated phase-in percentage for the referenced model year.

100% phase-in required by MY 2013 for LDV/LLDTs, MY 2015 for HLDT/MDPVs.

Interim In-use Standard = Test Group FEL + 0.1 g/mi

Model Year of Introduction	2008	2009	2010	2011	2012	2013	2014	2015
LDV/LLDT: Model year for which interim in-use standard applies	2008 2009 2010 2011	2009 2010 2011 2012	2010 2011 2012 2013	2011 2012 2013	2012 2013 2014	2013 2014		
HLDT/MDPV: Model year for which interim in-use standard applies			2010 2011 2012 2013	2011 2012 2013 2014	2012 2013 2014 2015	2013 2014 2015	2014 2015 2016	2015 2016

Interim In-use Standard: 86.1811-10(u), 86.1864-10(i).

Otherwise the in-use standard is the certification standard.

Standards apply for purposes of in-use testing only and do not apply to certification or Selective Enforcement Auditing.

Calculating Standard

Fleet-Average NMHC exhaust emissions	=	$\frac{(N \times \text{FEL})}{\text{Total \# vehicles sold}}$
---	---	---

Method: 86.1811-10(g)(2)(ii), 86.1864-10(m).

Computed at end of model year using actual sales.

N = The number of LDVs and LLDTs, or HLDTs and MDPVs, sold within the applicable FEL, based on vehicles counted to the point of first sale.

Total # vehicles sold = LDV + LLDTs, or HLDT + MDPVs

DRAFT SUMMARY – REGULATIONS TAKE PRECEDENCE

STANDARD

- Testing [86.1864-10(k)]: Cold carbon monoxide (CO) 20°F FTP test at either durability or test group level; alternative testing procedures may be used provided cold temperature NMHC emissions do not decrease; testing must be on a loaded vehicle weight (LVW) basis.
- Family Emission Limit (FEL) [86.1864-10(m)]: Mfr assigns FEL to all vehicles in durability or test group. One-decimal place FEL is standard for group for full useful life. No cap on FEL.
- Certification, Compliance, and Enforcement: 86.1811-10(g)(2)(iv); 86.1848-10; 86.1864-10(n) and (o).
- Full useful life [86.1805-04(g), 86.1811-10(g), 86.1864-10(b)]:
 - LDV/LLDT: 10 yrs or 120,000 miles, whichever comes first.
 - HLDT/MDPV: 11 yrs or 120,000 miles, whichever comes first.
- Intermediate Useful Life Standard [86.1811-10(g)(2)]: None.

DURABILITY AND VEHICLE DETERMINATION

- Durability Demonstration [86.1823-01(a)(3)(i)(C), 86.1864-10(j)]: A separate DF may be calculated exclusively using cold temperature NMHC test data to determine compliance with cold temperature NMHC emission standards. For determining compliance with full useful life cold NMHC emission standards, the 68-86 degree F 120,000 mile full useful life NMOG DF may be used.
- Test Group Determination [86.1827-01(a)(5)]: To be in the same test group, vehicles must be subject to the same emission standards (or FEL in the case of cold temperature NMHC standards), except that a mfr may request to group vehicles into the same test group as vehicles subject to more stringent standards, so long as all the vehicles within the test group are certified to the most stringent standards applicable to any vehicle within that test group.
- Emission Data Vehicle Selection [86.1864-10(l)]: For cold temperature NMHC exhaust emission compliance for each durability group, the vehicle expected to emit the highest NMHC emissions at 20 degrees F on candidate in-use vehicles shall be selected from the test vehicles. When the expected worst-case cold temperature NMHC vehicle is also the expected worst-case cold CO vehicle, then cold testing is required only for that vehicle; otherwise, testing is required for both the worst-case cold CO vehicle and the worst-case cold temperature NMHC vehicle [86.1828-10(g)]. EDV in each durability group shall be tested in accordance with the test procedures in subpart C of this part or with alternative procedures requested by the mfr and approved in advance by the Administrator [86.1829-01(b)(3)].

PHASE-IN COMPLIANCE

- Regular Phase-in Compliance [86.1811-10(g)(5) and (6)]: Mfrs must show compliance with required phase-in schedules by submitting information in Part I applications as required by §86.1844(d)(13). Sales percentages for determining phase-in compliance based upon projected 50-State sales; mfr may petition to allow actual volume produced to be used in lieu of projected sales.
- Alternate Phase-in Compliance [86.1811-10(g)(5)(ii)]: Mfr shows in certification application for the first year in which it intends to use such a schedule, and in each succeeding year during the phase-in, the intended phase-in percentages for that model year and the remaining phase-in years along with the intended final sum of those percentages. In its year end annual reports, mfr must include sufficient information so that the Administrator can verify compliance with the alternative phase-in schedule.

CREDIT PROGRAM

- Early Credits [86.1864-10(o)(5), 86.1811-10(g)(2)(iv)]: Mfrs may certify LDV/LLDTs for MY 2008-2009 in order to bank credits for use in MY 2010 and later; mfrs may certify HLDT/MDPVs for MY 2010-2011 in order to bank credits for use in MY 2012 and later; early HLDT/MDPV credits may not be applied to LDV/LLDTs before MY 2010; early LDV/LLDT credits may not be applied to HLDT/MDPV before MY 2012.
- Credit Use [86.1864-10(o)(7)]: Credits may be banked and used in a future MY in which a mfr's average exceeds standard, exchanged between the LDV/LLDT and HLDT/MDPV fleets of a given mfr, traded to another mfr; mfr must apply available credits to offset any deficits before trading or carrying over; credits not be permitted to address Selective Enforcement Auditing or in-use testing failures. Vehicles below the standard, and either introduced before phase-in begins or in excess of required phase-in percentage, may both generate credits and offset phase-in requirements.
- Credit Life [86.1864-10(o)(6)]: Credits are not subject to discount or expiration date except as required under the deficit carryforward provisions.

DRAFT SUMMARY – REGULATIONS TAKE PRECEDENCE

- Generating Credits [86.1864-10(o) and (o)(4)]: Credits may be generated prior, during, and after the phase-in period. Credits are earned on the last day of the model year using equation, rounded to the nearest tenth: Credits or Debits = (Cold Temperature NMHC Standard – Mfr's Sales-Weighted Fleet Avg Cold NMHC Emissions) × (Total Number of Vehicles Sold); where Total Number of Vehicles Sold = Total 50-State sales based on the point of first sale.
- Compliance [86.1864-10(o)(3)]: The averaging, banking and trading program shall be enforced through the certificate of conformity.
- Debits [86.1864-10(o)(8)]: mfr may carry deficit forward into the next model year only occur after mfr uses banked credits. At the end of that next model year, the deficit must be covered with an appropriate number of credits that the mfr generates or purchases. Any remaining deficit shall be subject to an enforcement action. Mfrs not permitted to run a deficit for two consecutive years

APPLICABILITY

- Fuel: gasoline-fueled LDV/LLDTs and HLDT/MDPVs; testing with other fuels (e.g., E85, diesel) not required; multi-fuel, bi-fuel or dual-fuel vehicles must comply with requirements using gasoline only [86.1811-10(g)(2)]. For any AECD uniquely used on multi-fuel vehicles when operated on fuels other than gasoline, EPA may request engineering emission data to quantify any emission impact and validity of the AECD [86.1844-01(d)(11), 86.1864-10(k)(3)].
- Altitude: Standards only apply at low altitude [86.1810-09(f)(1)], [86.1864-10(c)]; testing at high altitude not required; mfrs shall submit an engineering evaluation indicating that common calibration approaches are utilized at high altitudes. Any deviation from low altitude emission control practices shall be included in the auxiliary emission control device (AECD) descriptions submitted at certification. Any AECD specific to high altitude shall require engineering emission data for EPA evaluation to quantify any emission impact and validity of the AECD [86.1810-09(f)(2), 86.1844-01(d)(11), 86.1864-10(k)(3)].
- Conversion and ICIs [86.1864-10(a)]: Applies to aftermarket conversion systems as defined in 40 CFR 85.502, including conversion of MDPVs; vehicles imported by ICIs as defined in 40CFR 85.1502.

DRAFT SUMMARY – REGULATIONS TAKE PRECEDENCE

2. Evaporative Emissions

Evaporative Emission Standards (Grams of hydrocarbons per test) [86.1811-09(e)(1)]

Vehicle Category	Model Year	3-Day Diurnal Plus Hot Soak	Supplemental 2-Day Diurnal Plus Hot Soak
LDVs	2009	0.50	0.65
LLDTs	2009	0.65	0.85
HLDTs	2010	0.90	1.15
MDPVs	2010	1.00	1.25

STANDARD

- Standards equivalent to California's LEV II standards; would represent about 20-50% reduction (depending on vehicle weight class and type of test) in diurnal plus hot soak standards from the Tier 2 standards that will be in effect in the years immediately preceding the implementation of proposed standards.
- Standards apply both for certification and in-use [86.1811-09(a)(5), (e), (e)(1)].
- Useful life remains unchanged from Tier 2 evaporative requirements; (10 years/120,000 miles for LDVs, LLDTs and 11 years/120,000 miles for HLDTs, MDPVs; optionally 15 years/150,000 miles); ref. 86.1805-04(a) and (b).
- Interim In-use: Tier 2 evaporative emissions standards apply in-use for only the first three model years after an evaporative family is first certified:
 - LDV/LLDTs certified prior to the 2012 model year [86.1811-09(t)(1)].
 - HLDTs and MDPVs certified prior to the 2013 model year [86.1811-09(t)(2)].
- Multi-Fuel Vehicles: Standards apply to the non-gasoline portion of multi-fueled vehicles beginning in 2012 with a 3-year phase in of 30/60/100% based on a combined fleet of LDVs/LLDTs and HLDTs/MDPVs [86.1811-09(e)(1)(ii) and (iii)].

TIMING

- LDV/LLDT: 100% compliance in model year 2009; no phase-in period [86.1811-09(e)(1)].
- HLDT/MDPV: 100% compliance in model year 2010; no phase-in period [86.1811-09(e)(1)].

DIFFERENCES IN TIER 2 AND LEV II EVAPORATIVE EMISSION TEST REQUIREMENTS

Test Requirement	EPA Tier 2	California LEV II
Fuel volatility (Reid Vapor Pressure in psi):	9	7
Diurnal temperature cycle (degrees F):	72 to 96	65 to 105
Running loss test temperature (degrees F):	95	105

- Test Procedure & Test Fuel:** For low altitude 2-day & 3-day evaporative tests, manufacturers may use either the Federal test procedure (with 9RVP Indolene Tier 2 test fuel) or the California test procedure (7 RVP Phase II test fuel); ref. 86.1811-09(e)(7).
- Durability:** Tier 2 evaporative program requires mfrs to certify the durability of their evaporative emission systems using a fuel containing the maximum allowable concentration of alcohols (highest alcohol level allowed by EPA in the fuel on which the vehicle is intended to operate, i.e., a "worst case" test fuel). Under current requirements, this fuel would be about 10 percent ethanol by volume. (We are retaining these Tier 2 durability requirements for the proposed evaporative emissions program.) California does not require this provision.
- Hardware:** To compensate for the increased vulnerability of system components to alcohol fuel, mfrs have indicated that they will produce a more durable evaporative emission system than the Tier 2 numerical standards would imply, using the same low permeability hoses and low loss connections and seals planned for California LEV II vehicles.

APPLICABILITY

- Applies to gasoline-fueled, dedicated natural gas-fueled, dedicated liquefied petroleum gas-fueled, dedicated ethanol-fueled, dedicated methanol-fueled and multi-fueled vehicles. [86.1811-09(e)(1)].

DRAFT SUMMARY – REGULATIONS TAKE PRECEDENCE

3. Provisions for Small Volume Mfrs (inc. ICIs and AFVCs)

PROVISIONS

- Certification procedures. Covered in §86.1838-01 [86.1864-10(d)].
- Categories of businesses covered: small volume mfrs (SVMs), independent commercial importers (ICIs), and alternative fuel vehicle converters. For certification purposes, SVMs include ICIs and alternative fuel vehicle converters since they sell less than 15,000 vehicles per year.
- Phase-in flexibilities: Provided in §86.1811-04(k)(5)[86.1864-10(g)].
- Hardship provisions: SVMs may apply for up to an additional 2 years to meet the 100% phase-in requirements for cold NMHC [86.1811-04(q)(1)(viii) and (ix)] and the delayed requirement for evaporative emissions [86.1811-04(q)(1)(vi) and (vii), 86.1864-10(h)].

TIMING

- Cold temperature exhaust standards:
 - LDV/LLDTs: Exempt from phase-in requirements for MY 2010, 2011, and 2012, but must comply with the 100% requirement for MY 2013 and later [86.1811-04(k)(5)(vi)].
 - HLDT/MDPVs: Exempt from phase-in requirements for MY 2012, 2013, and 2014, but must comply with the 100% requirement for MY 2015 and later [86.1811-04(k)(5)(vii)]
- Evaporative emission standards:
 - LDV/LLDTs: Exempt for model years 2009 and 2010, but must comply with the Tier 2 evaporative emission standards for model years 2009 and 2010 [86.1811-04(k)(5)(iv)]. 100% compliance by model year 2011; no phase-in period.
 - HLDT/MDPVs: Exempt for model years 2010 and 2011, but must comply with the Tier 2 evaporative emission standards for model years 2010 and 2011 [86.1811-04(k)(5)(v)]. 100% compliance by model year 2012; no phase-in period.

SPECIAL PROVISIONS FOR INDEPENDENT COMMERCIAL IMPORTERS (ICIs)


- Timing/Phase-in: ICIs, which qualify as SVMs, are exempt from the cold temperature NMHC phase-in intermediate percentage requirements [85.1515 (c)(8)(iii)]. Nonconforming LDV/LLDTs originally manufactured in OP years 2010 and later must meet the cold temperature NMHC emission standards [85.1515(c)(8)(i)]. Nonconforming HLDTs and MDPVs originally manufactured in OP years 2012 and later must meet the cold temperature NMHC emission standards [85.1515(c)(8)(ii)].
- Evaporative Emissions:
 - Nonconforming LDV/LLDTs originally manufactured in OP years 2009 and later must meet the evaporative emission standards. However, LDV/LLDTs originally manufactured in OP years 2009 and 2010 and imported by ICIs who qualify as small SVMs are exempt from the LDV/LLDT evaporative emission standards, but must comply with the Tier 2 evaporative emission standards [85.1515 (c)(2)(vii)].
 - Nonconforming HLDTs and MDPVs originally manufactured in OP years 2010 and later must meet the evaporative emission standards. However, HLDTs and MDPVs originally manufactured in OP years 2010 and 2011 and imported by ICIs, who qualify as SVMs, are exempt from the HLDTs and MDPVs evaporative emission standards, but must comply with the Tier 2 evaporative emission standards [85.1515 (c)(2)(viii)].
- Credits, Averaging, Banking, and Trading:
 - ICIs may meet an FEL below the standards and bank or sell credits. An ICI may not meet a higher FEL than the fleet average standards, unless it demonstrates that it has obtained appropriate and sufficient NMHC credits. [85.1515 (c)(8)(iv)]
 - Where an ICI desires to obtain a certificate using a higher FEL, but does not have sufficient credits, the Administrator may issue such certificate if the ICI has also obtained a certificate of conformity for vehicles certified using a FEL lower than that required. The ICI may then import vehicles to the higher FEL only to the extent that it has generated sufficient credits from vehicles certified to a FEL lower than the fleet average standard during the same model year. [85.1515 (c)(8)(v)]
 - ICIs using FELs higher than the standards must monitor their imports so that they do not import more vehicles certified to such FELs than their available credits can cover. ICIs must not have a credit deficit at the end of a model year and are not permitted to use the deficit carryforward provisions. [85.1515 (c)(8)(vi)]

To: edward.popa@audi.com[]
Cc: CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;stuart.johnson@vw.com[];
stuart.johnson@vw.com[]
From: CN=David Good/OU=AA/O=USEPA/C=US
Sent: Thur 9/24/2009 5:51:41 PM
Subject: 2008, 2009 VW/Audi IUVP Test plan
2005-09 IUVP Test Plan.308.doc

Edy,

re: 2008, 2009 IUVP Test plan

When you get a chance, please send Joel Ball and me the number of IUVP vehicles VW/Audi will test for the 2008 and 2009 model years. Please use the attached example format and change the numbers accordingly.

Joel Ball is going to take the lead for EPA on the IUVP program. You can email or call him (and  of CARB) with any IUVP questions you have about recruiting, testing, etc. If Joel is out of the office, I'll serve as his back-up, so feel free to contact me.

Joel will try to send you a snapshot of the IUVP data which we show in CFEIS and Verify so you can check your records.

Thanks

IUVP Example Test Plan

Manufacturer _____ Date _____

2005, 2008 & 2009 MY IUVP Testing Requirements

Model Year & IUVP program	FTP Tests	US06 Tests	2-Day EVAP Tests	ORVR Tests	Estimated Completion Date
2004 high mileage					8/1/09
2005 high mileage	40	40	5	5	8/1/10
2006 high mileage					8/1/11
2007 high mileage					8/1/12
2008 high mileage					8/1/13
2009 high mileage					8/1/14
2008 low mileage	20	20	5	5	8/1/09
2009 low mileage	20	20	5	5	8/1/10

c://1iuvp/2003-07 iuvp test plan.308.doc

To: christoph.kohnen@vw.com[]
Cc: []
Bcc: []
From: CN=Joel Ball/OU=AA/O=USEPA/C=US
Sent: Mon 9/28/2009 8:31:39 PM
Subject: VERR 2009/08/07

Hello Mr. Kohnen,

I received the mentioned VERR. I was a little surprised to see that VW is replacing the glow plugs as part of the repair procedure. Could you please explain the reason for replacing the glow plugs? Were there failures or defects found? If so, was there a defect report issued for these problems? Will there be a VERR issued to replace the glow plugs on automatic transmission vehicles?

Best Regards,

Joel Ball
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4238
ball.joel@epa.gov

To: Joel Ball/AA/USEPA/US@EPA;David Good/AA/USEPA/US@EPA[]; avid Good/AA/USEPA/US@EPA[]
Cc: "Johnson, Stuart" [Stuart.Johnson@vw.com]; Kohnen, Christoph (VWGoA)" [christoph.kohnen@vw.com]
From: "Popa, Edward"
Sent: Tue 9/29/2009 5:59:03 PM
Subject: 2008, 2009 VW/Audi IUVP Test plan
2005-09 IUVP Test Plan.308.doc

Hello Dave, Hello Joel,

Attached is the plan for the vehicles in MY2008 and MY2009.
I also put the right number of vehicles for MY2005 in the spread sheet.

If you have any other questions please let me know.
And it would be nice to have the snapshot of the IUVP-Data from
CEFIS/VERIFY if possible.

Thank you and have a nice week,
Edy

Edward-Fabian Popa
Manager In-Use Emission Compliance

Volkswagen Group of America, Inc.
Engineering and Environmental Office
3800 Hamlin Road
Auburn Hills, MI 48326, U.S.A.
Tel. +1 248 754 4211
Mobile: +1 248 881 4095
Fax: +1 248 754 4207
mailto:edward.popa@audi.com
http://www.vw.com
http://www.audiusa.com

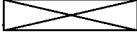
-----Original Message-----

From: Good.David@epamail.epa.gov [mailto:Good.David@epamail.epa.gov]
Sent: Thursday, September 24, 2009 1:52 PM
To: Popa, Edward
Cc: Ball.Joel@epamail.epa.gov; Johnson, Stuart
Subject: 2008, 2009 VW/Audi IUVP Test plan

Edy,

re: 2008, 2009 IUVP Test plan

When you get a chance, please send Joel Ball and me the number of IUVP
vehicles VW/Audi will test for the 2008 and 2009 model years. Please
use the attached example format and change the numbers accordingly.

Joel Ball is going to take the lead for EPA on the IUVF program. You can email or call him (and  of CARB) with any IUVF questions you have about recruiting, testing, etc. If Joel is out of the office, I'll serve as his back-up, so feel free to contact me.

Joel will try to send you a snapshot of the IUVF data which we show in CFEIS and Verify so you can check your records.

Thanks

(See attached file: 2005-09 IUVF Test Plan.308.doc)

IUVP Example Test Plan

Manufacturer Volkswagen Group of America

Date 09/29/2009

2005, 2008 & 2009 MY IUVP Testing Requirements

Model Year & IUVP program	FTP Tests	US06 Tests	2-Day EVAP Tests	ORVR Tests	Estimated Completion Date
2004 high mileage					8/1/09
2005 high mileage	68	68	11	11	8/1/10
2006 high mileage					8/1/11
2007 high mileage					8/1/12
2008 high mileage					8/1/13
2009 high mileage					8/1/14
2008 low mileage	24	24	10	10	8/1/09
2009 low mileage	27	27	10	10	8/1/10

c://1iuvp/2003-07 iuvp test plan.308.doc

To: Joel Ball/AA/USEPA/US@EPA[]
Cc: "Kohnen, Christoph (VWGoA)" [christoph.kohnen@vw.com]
From: "Hennard, Mike"
Sent: Wed 9/30/2009 4:51:07 PM
Subject: RE: VERR 2009/08/07
mike.hennard@vw.com

Joel:

I tried to contact you by telephone several times this week. Thus – I will send reply to your questions via e-mail.

- 1) VWGoA has submitted EDIR reports covering this topic for vehicles involved in glow plug replacement Service Action.
- 2) VWGoA issued an additional VERR regarding glow plug replacement for all vehicles involved on August 6, 2009.
- 3) VWGoA released this Service Action to assure customer satisfaction relating to glow plugs with the technical repair being updating all vehicles with ceramic type glow plugs to the later version steel glow plug .

If you require any additional information regarding this issue, please do not hesitate to call me to discuss.

Michael Hennard

Manager - Emissions Compliance EEO

Volkswagen Group of America

3800 Hamlin Road

Auburn Hills, MI 48326

Telephone Number: 248 754 4202

Fax: 248 754 4207

mike.hennard@vw.com

From: Kohnen, Christoph (VWGoA)
Sent: Monday, September 28, 2009 4:59 PM
To: Hennard, Mike
Subject: Fw: VERR 2009/08/07

Please let's discuss!!
Dr. C. Kohnen
Engineering and Environmental Office VWGoA

Send by Blackberry

From: Ball.Joel@epamail.epa.gov <Ball.Joel@epamail.epa.gov>
To: Kohnen, Christoph (VWGoA)
Sent: Mon Sep 28 16:31:39 2009
Subject: VERR 2009/08/07

Hello Mr. Kohnen,

I received the mentioned VERR. I was a little surprised to see that VW is replacing the glow plugs as part of the repair procedure. Could you please explain the reason for replacing the glow plugs? Were there failures or defects found? If so, was there a defect report issued for these problems? Will there be a VERR issued to replace the glow plugs on automatic transmission vehicles?

Best Regards,

Joel Ball
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4238
ball.joel@epa.gov

To: "Hennard, Mike" [mike.hennard@vw.com]
Cc: "Kohnen, Christoph (VWGoA)" [christoph.kohnen@vw.com]
Bcc: []
From: CN=Joel Ball/OU=AA/O=USEPA/C=US
Sent: Wed 9/30/2009 6:26:14 PM
Subject: RE: VERR 2009/08/07
mike.hennard@vw.com

Thank you for the quick reply, I will look for the other reports you mentioned. I'll let you know if any more questions arise.

Best regards,

Joel Ball
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4238
ball.joel@epa.gov

From: "Hennard, Mike" <mike.hennard@vw.com>
To: Joel Ball/AA/USEPA/US@EPA
Cc: "Kohnen, Christoph (VWGoA)" <christoph.kohnen@vw.com>
Date: 09/30/2009 12:52 PM
Subject: RE: VERR 2009/08/07

Joel:

I tried to contact you by telephone several times this week. Thus – I will send reply to your questions via e-mail.

- 1) VWGoA has submitted EDIR reports covering this topic for vehicles involved in glow plug replacement Service Action.
- 2) VWGoA issued an additional VERR regarding glow plug replacement for all vehicles involved on August 6, 2009.
- 3) VWGoA released this Service Action to assure customer satisfaction relating to glow plugs with the technical repair being updating all vehicles with ceramic type glow plugs to the later version steel glow plug .

If you require any additional information regarding this issue, please do not hesitate to call me to discuss.

Michael Hennard
Manager - Emissions Compliance EEO

Volkswagen Group of America
3800 Hamlin Road
Auburn Hills, MI 48326

Telephone Number: 248 754 4202
Fax: 248 754 4207
mike.hennard@vw.com

From: Kohnen, Christoph (VWGoA)
Sent: Monday, September 28, 2009 4:59 PM
To: Hennard, Mike
Subject: Fw: VERR 2009/08/07

Please let's discuss!!
Dr. C. Kohnen
Engineering and Environmental Office VWGoA

Send by Blackberry

From: Ball.Joel@epamail.epa.gov <Ball.Joel@epamail.epa.gov>
To: Kohnen, Christoph (VWGoA)
Sent: Mon Sep 28 16:31:39 2009
Subject: VERR 2009/08/07

Hello Mr. Kohnen,

I received the mentioned VERR. I was a little surprised to see that VW is replacing the glow plugs as part of the repair procedure. Could you please explain the reason for replacing the glow plugs? Were there failures or defects found? If so, was there a defect report issued for these problems? Will there be a VERR issued to replace the glow plugs on automatic transmission vehicles?

Best Regards,

Joel Ball
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4238
ball.joel@epa.gov

To: Lynn Sohacki/AA/USEPA/US@EPA[]
Cc: "Kohnen, Christoph (VWGoA)" [christoph.kohnen@vw.com]; Johnson, Stuart" [Stuart.Johnson@vw.com]; Kolomitz, Michael" [Michael.Kolomitz@vw.com]
From: "Popa, Edward"
Sent: Fri 10/2/2009 2:07:55 PM
Subject: In-use vehicles scheduled for next week
[In-Use Parameters Form.xls](#)
[Q7 4.2Lcanisterloading.ppt](#)
[Fuel Drain Q7-V8FSI.PPT](#)

Hello Lynn,

Please find below and attached the test information and parameters for the EPA In-Use Surveillance Test Program -Eng. Fam. 7ADXT04.2358 and for the vehicle M158RXX-0092X (2007 Audi/Q7):

Lab: NVFEL Ann Arbor,
Michigan
Engine Family: 7ADXT04.2358
Estimated Start Date: Week-ending June 19, 2009
Recall/Testing Representative: Lynn Sohacki
Telephone Number: (734) 214-4851
E-mail address: Sohacki.Lynn@epa.gov
Class Numbers: M158/M159 (low-mileage /
high-mileage)

- General Test Group Information:

Engine Fam.: 7ADXT04.2358
Concept: 4.2
Em. Standard: LEV II - BIN 5
Sales Area: 50 States / Canada
Engine HP: 350 hp
Engine Code: BAR
Models in TG: Audi Q7, Touareg
EVAP Fam.: 7ADXR0170358, 7ADXR0230276
EVAP Standard: LEV II - Tier 2
of sold vehicles in TG: 9,727

If you have any questions or need extra information for the procured vehicle please don't hesitate to contact me.

Thank you and best regards,
Edy

Edward-Fabian Popa
Manager In-Use Emission Compliance

Volkswagen Group of America, Inc.
Engineering and Environmental Office
3800 Hamlin Road
Auburn Hills, MI 48326, U.S.A.
Tel. +1 248 754 4211

Mobile: +1 248 881 4095
Fax: +1 248 754 4207
mailto:edward.popa@audi.com
<http://www.vw.com>
<http://www.audiusa.com>

-----Original Message-----

From: Sohacki.Lynn@epamail.epa.gov [mailto:Sohacki.Lynn@epamail.epa.gov]

Sent: Wednesday, September 30, 2009 4:03 PM

To: Popa, Edward

Subject: In-use vehicles scheduled for next week

Hi, Edy.

Listed below is the information for the vehicles that we have scheduled for next week.

M158RXX-0092X (2007 Audi/Q7) - **Ex. 6** 0900 vehicle pick up on 10/8/09 (Thursday)

Please send the following to me for these vehicles before pick-up.
Please use the attached form:

vehicle target road-load coefficients
fuel tank capacity
40% tank capacity
tire pressure
applicable in-use standards (Does this vehicle qualify for relaxed in-use standards as per 86.1811-04(p)?)

To avoid unnecessary delays and correspondence, please also include explicit directions and, if necessary, pictures for:

disabling traction control, stability control and any load leveling the vehicle may have
preferred method for loading the canister
preferred fuel drain method
any special starting procedures
ABS disabling instructions
for flex-fuel vehicles, the fuel switch procedure

If you have any questions, please feel free to contact me. Thank you.

Lynn Sohacki
Environmental Protection Agency
(734)214-4851
(734)214-4869 fax

(See attached file: In-Use Parameters Form.xls)



National Vehicle and Fuel Emissions Laboratory

2565 Plymouth Road, Ann Arbor, Michigan 48105

Vehicle Parameters for In-use Testing

EPA Vehicle Control Number:

Equivalent Test Weight: Pounds

Nominal Fuel Tank Capacity: Gallons **40% Fill** gallons

Drive Axle: Front, Rear or All wheel drive

Tire Pressure: PSI

Vehicle Target Road-Load Coefficients

A Lb-force

B Lb-force*mph

C Lb-force*mph²

Vehicle Set Road-Load Coefficients

A Lb-force

B Lb-force*mph

C Lb-force*mph²

Does this vehicle qualify for relaxed in-use standards as set forth in 40 CFR 86.1811-04(p)? (Y/N)

Vehicle Starting Instructions, including Traction Control disabling:

To avoid unnecessary delays, please provide specific instructions and pictures (if necessary) for the following items:

Canister Loading Process:

Fuel Draining Process:

ABS Disabling Process:

Fuel Switch Process (Flex Fuel only):

Comments:

For internal EPA Use Only:

This information was obtained from:

- * Letter, e-mail, fax or other document delivered from the manufacturer
(attach any additional information from the manufacturer to this form)
- * Verbal instruction from the manufacturer's representative
- * Other (specify)

Manufacturer Representative: _____

Date: _____

EG&G Representative: _____

Date: _____

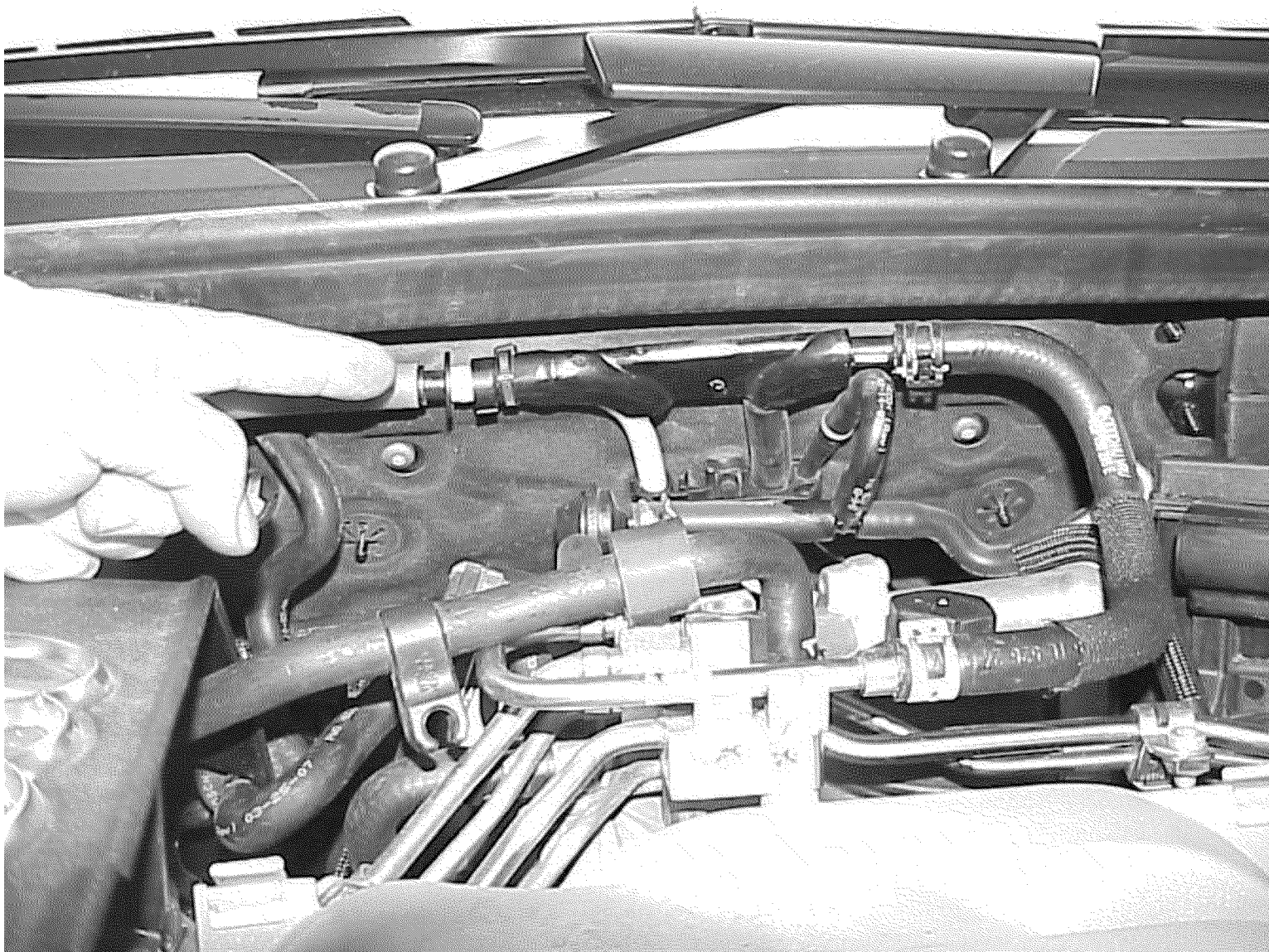
EPA Representative: _____

Date: _____

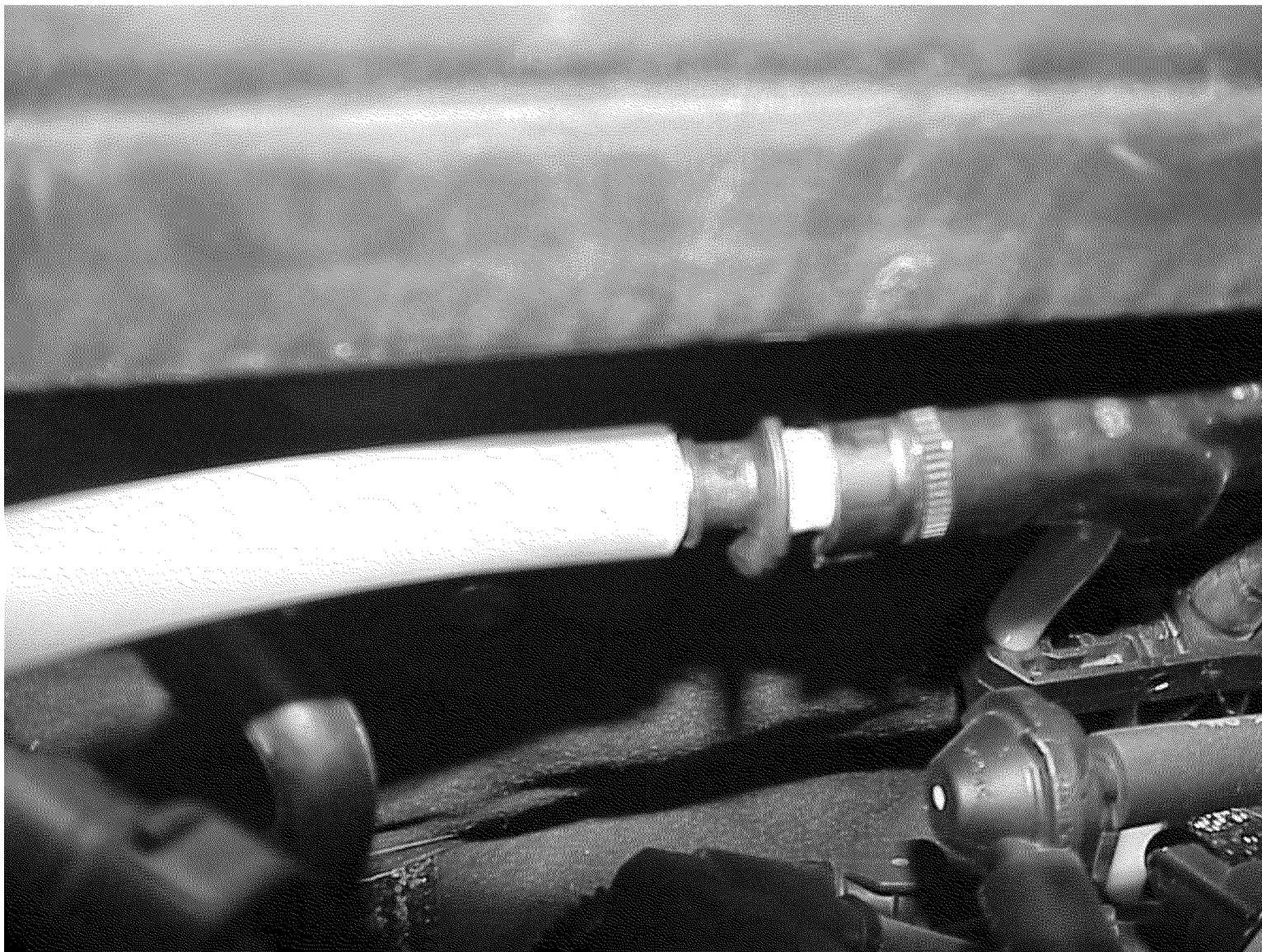
Disconnect to load canister here



Install load hose here



Load hose to station



Overflow open wheel well cover



Disconnect LDP hose



Connect hose for overflow to station for 2g breakthrough



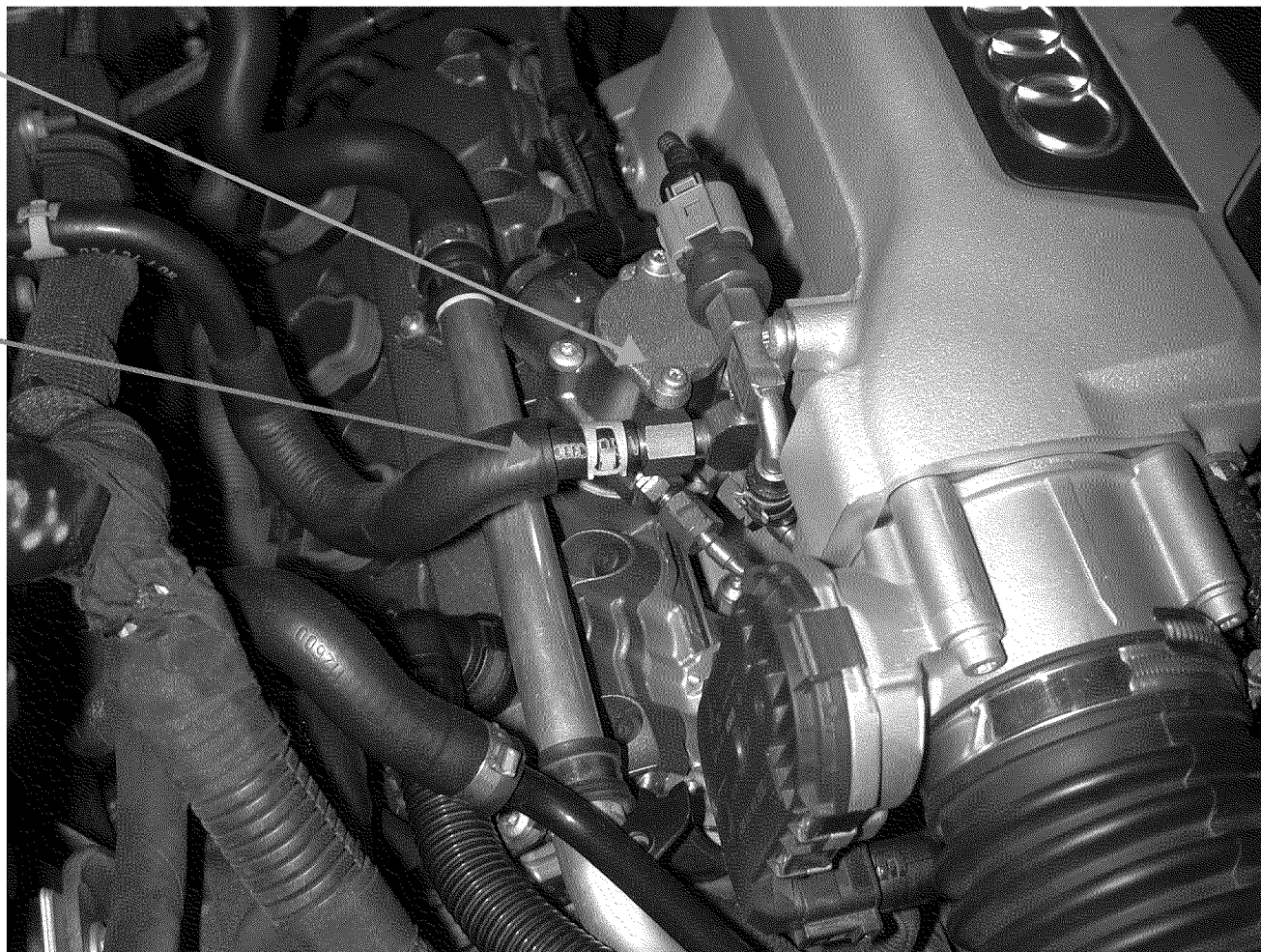
Fuel drain on V8FSI

- ▶ (1) pinch off hose to the high pressure fuel pump (system pressure apx. 6 bar)
- ▶ (2) start and run engine until it stops
- ▶ (3) conect T-piece
- ▶ (4) start and run engine until it stops

Fuel drain on V8FSI

fuel high pressure pump

hose to high pressure pump

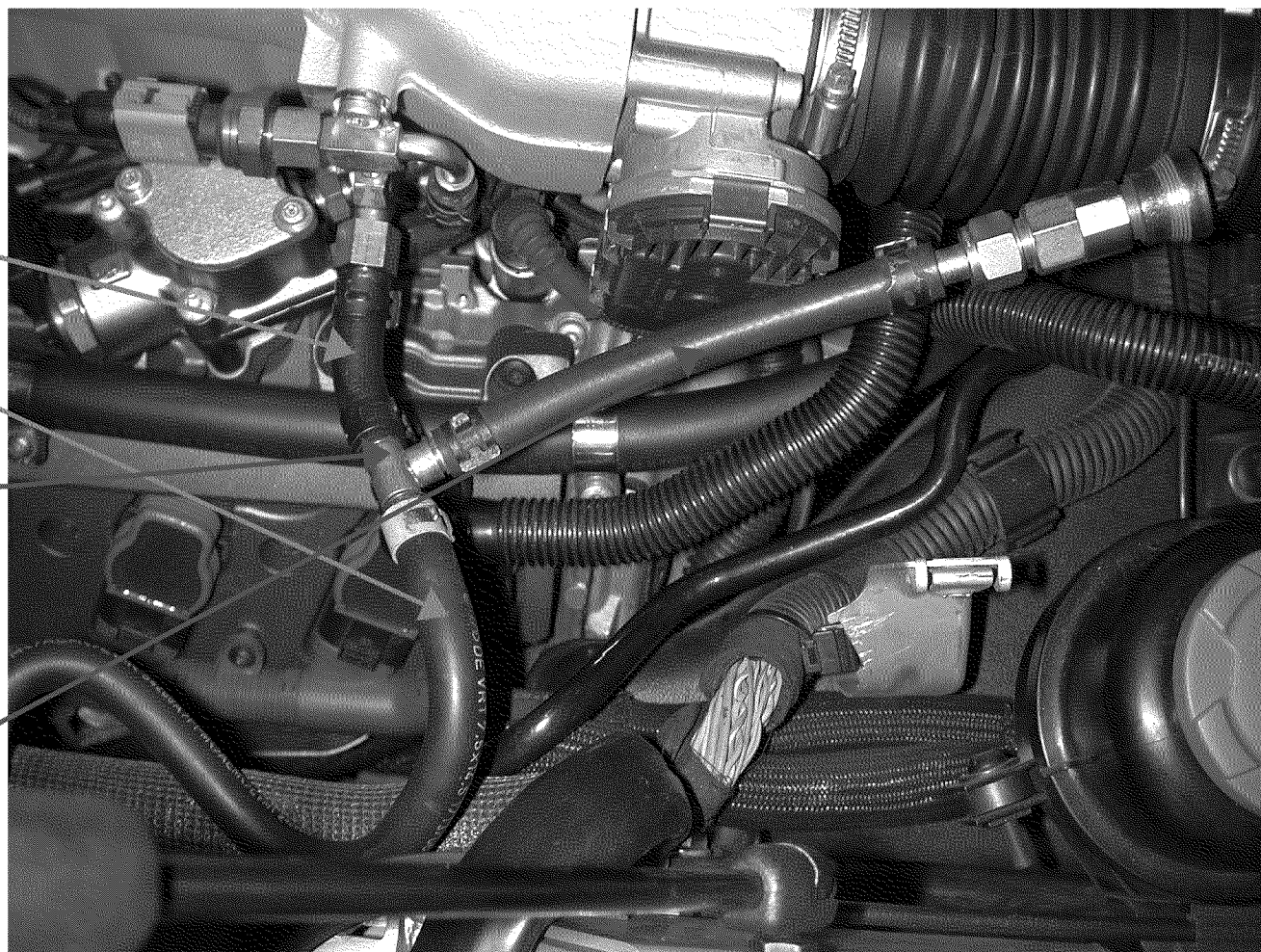


Fuel drain on V8FSI

conection to
high pressure pump

T-piece

Fuel drain hose



To: christoph.kohnen@vw.com>;richard.thomas@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]; ichard.thomas@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]
Cc: richard.thomas@vw.com;john.finneran@nhtsa.dot.gov;CN=David Good/OU=AA/O=USEPA/C=US@EPA;CN=Jeff Alson/OU=AA/O=USEPA/C=US@EPA;alan.berkowitz@nhtsa.dot.gov;CN=Ben Ellies/OU=AA/O=USEPA/C=US@EPA;Harry.Thompson@dot.gov;terry.anderson@dot.gov;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]; ohn.finneran@nhtsa.dot.gov;CN=David Good/OU=AA/O=USEPA/C=US@EPA;CN=Jeff Alson/OU=AA/O=USEPA/C=US@EPA;alan.berkowitz@nhtsa.dot.gov;CN=Ben Ellies/OU=AA/O=USEPA/C=US@EPA;Harry.Thompson@dot.gov;terry.anderson@dot.gov;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]; N=David Good/OU=AA/O=USEPA/C=US@EPA;CN=Jeff Alson/OU=AA/O=USEPA/C=US@EPA;alan.berkowitz@nhtsa.dot.gov;CN=Ben Ellies/OU=AA/O=USEPA/C=US@EPA;Harry.Thompson@dot.gov;terry.anderson@dot.gov;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]; N=Jeff Alson/OU=AA/O=USEPA/C=US@EPA;alan.berkowitz@nhtsa.dot.gov;CN=Ben Ellies/OU=AA/O=USEPA/C=US@EPA;Harry.Thompson@dot.gov;terry.anderson@dot.gov;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]; lan.berkowitz@nhtsa.dot.gov;CN=Ben Ellies/OU=AA/O=USEPA/C=US@EPA;Harry.Thompson@dot.gov;terry.anderson@dot.gov;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]; N=Ben Ellies/OU=AA/O=USEPA/C=US@EPA;Harry.Thompson@dot.gov;terry.anderson@dot.gov;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]; Harry.Thompson@dot.gov;terry.anderson@dot.gov;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]; erry.anderson@dot.gov;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]; N=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]
From: CN=David Good/OU=AA/O=USEPA/C=US
Sent: Mon 10/5/2009 7:17:13 PM
Subject: EPA CAFE letter & calculation attached - 2008 Volkswagen IP 2008-0590-IP-CAFE.pdf

This e-mail message forwards a signed EPA letter and Corporate Average Fuel Economy (CAFE) calculation to your office.

CONFIDENTIALITY: The cover letter and the summary information on the "CAFE report" page are not confidential. However, the information included in the calculation section of the attached PDF file contain sales information in more detail than is normally available to competitors and to the general public. Release of the calculation section of this PDF file is not authorized.

This e-mail and the Adobe Acrobat (.pdf) attachment are an official Agency action. If there is a problem with the attachment or if you are not the intended recipient, please contact your certification team representative immediately. Adobe Acrobat Reader version 5.0 or later is required to open the attached PDF document(s).

To: Jim Snyder/AA/USEPA/US@EPA[]
From: "Hart, Robert (VWoA)"
Sent: Tue 10/6/2009 6:33:10 PM
Subject: VW Group: Cold NMHC Phase In
[93PA sec 01-15 update 2.pdf](#)
[93UA sec 01-15 update 2.pdf](#)
[93UB sec 1-15 update 2.pdf](#)
[CommSection 16 2009 update 2.pdf](#)
<mailto:robert.hart@vw.com>

Hello Jim,

The attachments contain the application/Common Sections pages that I am going to add to the related applications and common section for MY 2009. I will be adding similar pages to the 2010 application updates.

Best regards,

Bob Hart

Robert Hart

Emissions & Regulatory Analyst

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4224

Fax: 248 754 4207

<mailto:robert.hart@vw.com>

Section 5	Pg. 1	Test Group Description	Engine Code	R.CH-No.:	Revision Date
Test Group		9AD XV02.03PA	all		09-28-2009

5.1 Test Group Description

Test Group Name	9AD XV02.03PA
Summary Sheet Number	640T2-04
Engine displacements covered	2.0 liters
Arrangement and number of cylinders	I 4
Vehicle class (es) covered	LDV
Federal Emissions Standards Class	Tier 2 BIN 2
California Emissions Standards Class	LEV II SULEV / Zero EVAP (Qualifies as PZEV)

5.2 Test Group Emission Standards

Please refer to CFEIS Summary sheet included in Section 7 for applicable emission standards.

5.3 Test Group Cold NMHC Emission Standards

In accordance with §86.1811-10, all vehicles of this test group are part of the Cold NMHC phase in and are certified to fulfill the following family emission limits (FEL):

Certification FEL = 0.3 g/mi

Interim in-use FEL = 0.4 g/mi (MY 2009, 2010, 2011, 2012)

Section 5	Pg. 2	Test Group Description	Engine Code	R.CH-No.:	Revision Date
Test Group		9AD XV02.03UA	all		09-28-2009

5.3 Test Group Cold NMHC Emission Standards

In accordance with §86.1811-10, the following vehicles of this test group are part of the Cold NMHC phase in and are certified to fulfill the following family emission limits (FEL):

Certification FEL = 0.3 g/mi

Interim in-use FEL = 0.4 g/mi (MY 2009, 2010, 2011, 2012)

Model	Engine Code	Transmission
A3	CCTA	DQ250-6F
A3	CCTA	MQ350-6F
A3 quattro	CCTA	DQ250-6A
TT Coupe quattro	CCTA	DQ250-6AT
TT Roadster quattro	CCTA	DQ250-6AT
TTS Coupe	CDMA	DQ250-6AS
TTS Roadster	CDMA	DQ250-6AS
Eos	CCTA	DQ250-6F
Eos	CCTA	MQ350-6F
Jetta	CCTA	DQ250-6F
Jetta	CCTA	MQ350-6F
Jetta Sportwagen	CCTA	DQ250-6F
Jetta Sportwagen	CCTA	MQ350-6F
GTI	CCTA	DQ250-6F
GTI	CCTA	MQ350-6F

Section 5	Pg. 1	Test Group Description	Engine Code	R.CH-No.:	Revision Date
Test Group		9AD XV02.03UB	all		09-28-2009

5.1 Test Group Description

Test Group Name	9AD XV02.03UB
Summary Sheet Number	640T2-20
Engine displacements covered	2.0 liters
Arrangement and number of cylinders	I-4 longitude
Vehicle class(es) covered	LDV
Federal Emissions Standards Class	Tier 2 BIN 5
California Emissions Standards Class	LEV-II ULEV

5.2 Test Group Emission Standards

Please refer to CFEIS Summary sheet included in Section 7 for applicable emission standards.

5.3 Test Group Cold NMHC Emission Standards

In accordance with §86.1811-10, all vehicles of this test group are part of the Cold NMHC phase in and are certified to fulfill the following family emission limits (FEL):
Certification FEL = 0.3 g/mi
Interim in-use FEL = 0.4 g/mi (MY 2009, 2010, 2011, 2012)

To: "Kata, Leonard" [Leonard.Kata@vw.com]
Cc: CN=Linc Wehrly/OU=AA/O=USEPA/C=US@EPA;CN=Antonio Fernandez/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=Martin Reineman/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;juergen.peter@volkswagen.de;Lothar.Rech@AUDI.DE[]; N=Antonio Fernandez/OU=AA/O=USEPA/C=US@EPA;CN=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=Martin Reineman/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;juergen.peter@volkswagen.de;Lothar.Rech@AUDI.DE[]; N=Stephen Healy/OU=AA/O=USEPA/C=US@EPA;CN=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=Martin Reineman/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;juergen.peter@volkswagen.de;Lothar.Rech@AUDI.DE[]; N=Joel Ball/OU=AA/O=USEPA/C=US@EPA;CN=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=Martin Reineman/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;juergen.peter@volkswagen.de;Lothar.Rech@AUDI.DE[]; N=Chris Nevers/OU=AA/O=USEPA/C=US@EPA;CN=Martin Reineman/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;juergen.peter@volkswagen.de;Lothar.Rech@AUDI.DE[]; N=Martin Reineman/OU=AA/O=USEPA/C=US@EPA;CN=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;juergen.peter@volkswagen.de;Lothar.Rech@AUDI.DE[]; N=Tom Anderson/OU=AA/O=USEPA/C=US@EPA;juergen.peter@volkswagen.de;Lothar.Rech@AUDI.DE[]; uergen.peter@volkswagen.de;Lothar.Rech@AUDI.DE[]; othar.Rech@AUDI.DE[]
From: CN=David Good/OU=AA/O=USEPA/C=US
Sent: Wed 10/7/2009 1:54:28 PM
Subject: followup to 9/24/09 EPA/VW meeting - phase-in of cold NMHC standards

Len,

EPA reviewed the cold NMHC calculations provided on slides 3-9 of your presentation in our 9/24/09 meeting at EPA.

We concur with the credit/debit calculations and method of determining compliance with cold NMHC emission standards outlined in those slides.

Regards

From: "Kata, Leonard" <Leonard.Kata@vw.com>
To: David Good/AA/USEPA/US@EPA
Date: 09/24/2009 09:54 AM
Subject: RE: MSAT - phase-in of cold NMHC standards

Hi Dave:

Unfortunately, the sum of the files is quite large so I will send the

information in parts. For the most part, this is background information. This is e-mail #1. I have added a document on Fuel Fired Heaters and ask that the information on Bench Test procedures (basically, from our March meeting) be considered for acceptance.

Best regards,

Len

Leonard W. Kata
Manager
Emission Regulations and Certification
Engineering and Environmental Office

Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
Phone: (248) 754-4204
Cell: (248) 797-3886
FAX: (248) 754-4207
E-Mail: leonard.kata@vw.com

-----Original Message-----

From: Good.David@epamail.epa.gov [mailto:Good.David@epamail.epa.gov]
Sent: Thursday, September 24, 2009 8:40 AM
To: Kata, Leonard; Rech, Lothar (I/EA-523); Peter, Juergen (EASZ/1)
Cc: Wehrly.Linc@epamail.epa.gov; Nevers.Chris@epamail.epa.gov;
Healy.Stephen@epamail.epa.gov; Ball.Joel@epamail.epa.gov;
Snyder.Jim@epamail.epa.gov; Anderson.Tom@epamail.epa.gov
Subject: MSAT - phase-in of cold NMHC standards

Len & all,

Attached is my summary of the MSAT rule. This should help answer your questions about the phase-in requirements of the cold NMHC standards.

[I think this summary is accurate reflection of the regulations, but of course, the regulations take precedent if this summary doesn't agree with the regulations.]

Please resend the handouts as they didn't come thru when you accepted the meeting in Lotus Notes.

Dave

(See attached file: MSAT Vehicle Provisions Summary FINAL RULE.508.pdf)
[attachment "Meeting Report.pdf" deleted by David Good/AA/USEPA/US]

To: Jim Snyder/AA/USEPA/US@EPA[]
From: "Hart, Robert (VWoA)"
Sent: Wed 10/7/2009 7:02:14 PM
Subject: VW Group: Field Fixes in the Verify System
<mailto:robert.hart@vw.com>

Hello Jim,

A total of 13 field fixes for the following test groups have been uploaded to the Verify System over the last two days.

6AD XV02.0366 (2)
7AD XV02.0366 (2)
8AD XV02.0366 (1)
9AD XV02.0366 (1)

6AD XV02.0352 (1)
7AD XV02.0352 (1)
8AD XV02.0352 (1)
9AD XV02.0352 (1)

9AD XV02.03UA (1)
AAD XV02.03UA (1)

6VWXV03.2535 (1)

If you have any questions regarding the attached information, please contact me as indicated below.

Best regards,

Bob Hart

Robert Hart

Emissions & Regulatory Analyst

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4224

Fax: 248 754 4207

<mailto:robert.hart@vw.com>

To: "Hart, Robert (VWoA)" [Robert.Hart@vw.com]
Cc: []
Bcc: []
From: CN=Jim Snyder/OU=AA/O=USEPA/C=US
Sent: Thur 10/8/2009 3:05:54 PM
Subject: Cold NMHC

Just an update, Wednesday was very hectic and I didn't get a chance to look at your attachments. I hope to review them this afternoon.

Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

To: Linc Wehrly/AA/USEPA/US@EPA[]
Cc: David Good/AA/USEPA/US@EPA[]; Martin Reineman/AA/USEPA/US@EPA[]; artin Reineman/AA/USEPA/US@EPA[]
From: "Kata, Leonard"
Sent: Wed 10/14/2009 3:11:17 PM
Subject: RE: Volkswagen Follow-Up Meeting

Hi Linc:

Thanks for the quick response. I propose 10:00 a.m. to 12:00 p.m. That would allow Juergen time to make a flight back to Germany later that day. If this is not convenient, there are evening flights too. I think that we have some flexibility on the time (a bit earlier or a bit later).

Best regards,

Len

Leonard W. Kata
Manager
Emission Regulations and Certification
Engineering and Environmental Office

Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
Phone: (248) 754-4204
Cell: (248) 797-3886
FAX: (248) 754-4207
E-Mail: leonard.kata@vw.com

From: Wehrly.Linc@epamail.epa.gov [mailto:Wehrly.Linc@epamail.epa.gov]
Sent: Wednesday, October 14, 2009 8:50 AM
To: Kata, Leonard
Cc: Good.David@epamail.epa.gov; Reineman.Martin@epamail.epa.gov
Subject: Re: Volkswagen Follow-Up Meeting

Len,

November 2, 2009 should work. Do you have a preferred time?

Linc

Linc Wehrly
Manager, Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4286
wehrly.linc@epa.gov

From: "Kata, Leonard" <Leonard.Kata@vw.com>
To: Linc Wehrly/AA/USEPA/US@EPA, David Good/AA/USEPA/US@EPA, Martin Reineman/AA/USEPA/US@EPA
Date: 10/13/2009 03:54 PM
Subject: Volkswagen Follow-Up Meeting

To all:

As you may recall, at our September 24, 2009 meeting, we raised the issue of certification procedures for fuel fired heaters (FFH). At that time, EPA indicated that they were not prepared to approve the proposed procedure. Mr. Juergen Peter, who had joined the discussion by telephone, mentioned that he would be in the U.S. at the end of October, and suggested that we defer further discussion until then.

I would like to check on your availability for this follow-up meeting. Mr. Peter and I will be in California for meetings during the last week of October, so I suggest that we meet on Monday, November 2, 2009, if possible. We think that 2 hours should be sufficient.

A graphic describing the basic procedure was attached to the hand-outs from our September 24, 2009 meeting.

Best regards,

Len

Leonard W. Kata
Manager
Emission Regulations and Certification
Engineering and Environmental Office

Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
Phone: (248) 754-4204
Cell: (248) 797-3886
FAX: (248) 754-4207
E-Mail: leonard.kata@vw.com

To: "Kata, Leonard" [Leonard.Kata@vw.com]
Cc: []
Bcc: []
From: CN=Linc Wehrly/OU=AA/O=USEPA/C=US
Sent: Wed 10/14/2009 8:35:30 PM
Subject: RE: Volkswagen Follow-Up Meeting

We'll do it at 10:00 am. See you then.

Linc Wehrly
Manager, Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4286
wehrly.linc@epa.gov

From: "Kata, Leonard" <Leonard.Kata@vw.com>
To: Linc Wehrly/AA/USEPA/US@EPA
Cc: David Good/AA/USEPA/US@EPA, Martin Reineman/AA/USEPA/US@EPA
Date: 10/14/2009 11:13 AM
Subject: RE: Volkswagen Follow-Up Meeting

Hi Linc:

Thanks for the quick response. I propose 10:00 a.m. to 12:00 p.m. That would allow Juergen time to make a flight back to Germany later that day. If this is not convenient, there are evening flights too. I think that we have some flexibility on the time (a bit earlier or a bit later).

Best regards,

Len

Leonard W. Kata
Manager
Emission Regulations and Certification
Engineering and Environmental Office

Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
Phone: (248) 754-4204
Cell: (248) 797-3886
FAX: (248) 754-4207
E-Mail: leonard.kata@vw.com

From: Wehrly.Linc@epamail.epa.gov [mailto:Wehrly.Linc@epamail.epa.gov]
Sent: Wednesday, October 14, 2009 8:50 AM

To: Kata, Leonard
Cc: Good.David@epamail.epa.gov; Reineman.Martin@epamail.epa.gov
Subject: Re: Volkswagen Follow-Up Meeting

Len,

November 2, 2009 should work. Do you have a preferred time?

Linc

Linc Wehrly
Manager, Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4286
wehrly.linc@epa.gov

From: "Kata, Leonard" <Leonard.Kata@vw.com>
To: Linc Wehrly/AA/USEPA/US@EPA, David Good/AA/USEPA/US@EPA, Martin Reineman/AA/USEPA/US@EPA
Date: 10/13/2009 03:54 PM
Subject: Volkswagen Follow-Up Meeting

To all:

As you may recall, at our September 24, 2009 meeting, we raised the issue of certification procedures for fuel fired heaters (FFH). At that time, EPA indicated that they were not prepared to approve the proposed procedure. Mr. Juergen Peter, who had joined the discussion by telephone, mentioned that he would be in the U.S. at the end of October, and suggested that we defer further discussion until then.

I would like to check on your availability for this follow-up meeting. Mr. Peter and I will be in California for meetings during the last week of October, so I suggest that we meet on Monday, November 2, 2009, if possible. We think that 2 hours should be sufficient.

A graphic describing the basic procedure was attached to the hand-outs from our September 24, 2009 meeting.

Best regards,

Len

Leonard W. Kata
Manager
Emission Regulations and Certification
Engineering and Environmental Office

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3800 Hamlin Road

Auburn Hills, MI 48326
Phone: (248) 754-4204
Cell: (248) 797-3886
FAX: (248) 754-4207
E-Mail: leonard.kata@vw.com

To: Jim Snyder/AA/USEPA/US@EPA[]
From: "Hart, Robert (VWoA)"
Sent: Thur 10/15/2009 8:07:16 PM
Subject: VW Group: Cold NMHC Updates
<mailto:robert.hart@vw.com>

Hello Jim,

I just realized that I did not inform you when I uploaded the MY 2009 application updates to add the Cold NMHC compliance text.

I finished them on Monday. The test results are in Section 7 on the Federal page for Cold CO as you requested.

Here is a list of the files that were uploaded.

CBI_9VWXB_COMMON_APP_UPD_R01.PDF
CBI_9ADXV02.03PA_APP_UPD_R01.PDF
CBI_9ADXV02.03UA_APP_UPD_R01.PDF
CBI_9ADXV02.03UB_APP_UPD_R01.PDF

The FOI copies of the same files were also uploaded.

Let me know if you have any questions.

Best regards,

Bob Hart

Robert Hart

Emissions & Regulatory Analyst

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4224

Fax: 248 754 4207

<mailto:robert.hart@vw.com>

To: "Hart, Robert (VWoA)" [Robert.Hart@vw.com]
Cc: []
Bcc: []
From: CN=Jim Snyder/OU=AA/O=USEPA/C=US
Sent: Fri 10/16/2009 7:46:12 PM
Subject: Re: VW Group: Cold NMHC Updates
<mailto:robert.hart@vw.com>

Looks okay. Thanks.

Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

From: "Hart, Robert (VWoA)" <Robert.Hart@vw.com>
To: Jim Snyder/AA/USEPA/US@EPA
Date: 10/15/2009 04:13 PM
Subject: VW Group: Cold NMHC Updates

Hello Jim,

I just realized that I did not inform you when I uploaded the MY 2009 application updates to add the Cold NMHC compliance text.

I finished them on Monday. The test results are in Section 7 on the Federal page for Cold CO as you requested.

Here is a list of the files that were uploaded.

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CBI_9AD XV02.03UA_APP_UPD_R01.PDF
CBI_9AD XV02.03UB_APP_UPD_R01.PDF

The FOI copies of the same files were also uploaded.

Let me know if you have any questions.

Best regards,

Bob Hart

Robert Hart
Emissions & Regulatory Analyst
Engineering and Environmental Office

Volkswagen Group of America, Inc.
3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4224

Fax: 248 754 4207

<mailto:robert.hart@vw.com>

To: Jim Snyder/AA/USEPA/US@EPA[]
From: "Hart, Robert (VWoA)"
Sent: Mon 10/19/2009 3:41:50 PM
Subject: VW Group: Test Waiver Requests Submitted
<mailto:robert.hart@vw.com>

Hello Jim,

This is just a "heads up" that I submitted two test waiver request for MY 2011 Audi carryover Test Group BADXV05.2LR8. Both vehicles were tested due to a higher ETW for the R8 Spyder.
The automated manual transmission version is a new "worst case" for this test group.

Best regards,

Bob Hart

Robert Hart

Emissions & Regulatory Analyst

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4224

Fax: 248 754 4207

<mailto:robert.hart@vw.com>

To: Jim Snyder/AA/USEPA/US@EPA[]
Cc: "Rodgers, William" [William.Rodgers@vw.com]; Reineke, Dennis" [Dennis.Reineke@vw.com]
From: "Hart, Robert (VWoA)"
Sent: Tue 10/27/2009 3:24:57 PM
Subject: AWWXV02.03PA
<mailto:robert.hart@vw.com>

Hello Jim,

Here's the names and phone numbers we spoke about again just in case.

Dennis Reineke - 248-754-4215
Bill Rodgers - 248-754-4219

Best regards,

Bob Hart

Robert Hart

Emissions & Regulatory Analyst

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4224

Fax: 248 754 4207

<mailto:robert.hart@vw.com>

To: Martin Reineman/AA/USEPA/US@EPA[]
Cc: Linc Wehrly/AA/USEPA/US@EPA;"Peter, Juergen (EASZ/1)"
[juergen.peter@volkswagen.de]; Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]
From: "Kata, Leonard"
Sent: Thur 10/29/2009 5:41:15 AM
Subject: RE: Volkswagen Follow-Up Meeting

Hello Marty:

The following are the questions raised in your e-mail accompanied by our responses, shown in bold print.

Are you intending to use a fuel fired heater on both diesel and gasoline fueled vehicles for the 2011 model year? Do you know which vehicles? Yes, both gasoline and diesel, but not for MY2011. Possible vehicle configurations diesel-powered vehicles, BEVs, HEVs.

Describe the test rig you refer to in the FFH certification procedure in more detail, as in what componentry is on the test rig. The test rig contains the FFH, fuel line to fuel tank (outside of the SHED). fuel pump for the heater, and electrical connections as needed to operate the heater. Please note that the fuel tank is certified with the vehicle.

On your certification procedure flow chart, describe the "run-down" following the FFH shut-off. The run-down procedure is the operation of the fan of the FFH in order to purge the FFH combustion chamber.

For EPA approval, are the calculated equivalent emissions still being compared to the CA LEV-II standard to determine the acceptability of the FFH? Yes, California LEV II ULEV.

On the evap test procedure, are the emissions added to the whole-vehicle evap emissions and compared to the 2 day evaporative emission standard? Any other info on the current state of the art for FFHs with respect to evap emission compliance? In particular, do you have knowledge from your FFH supplier that suggests the evap emissions from the FFH would exceed the evap standards if the FFH was installed on a certification vehicle and the FFH run for several minutes after the end of the FTP test but before the hot soak portion of the evap test? The intention is that the vehicle, including FFH, complies with the evaporative emission standard to which the vehicle is certified. The intent of the suggested certification procedure is to trigger changes to the FFH (shut-off valve added to the open fuel line) with the target to fulfill the zero-evap standard. Volkswagen has already stated to the FFH supplier that future certification would only be possible if the FFH fulfils the zero-evap standard, because agencies in the US would require certification and IUVP testing with the FFH installed.

I was going to contact **Ex. 7** at CARB and ask if they've revised any policies for FFHs. Are you aware of any changes, such as increasing the maximum ambient conditions under which the FFH may be operated? Any new guidance on CARB's policy on evap emissions from FFHs? No, not aware of any changes.

We can discuss these topics further during our upcoming meeting.

Best regards,

Len

Leonard W. Kata
Manager
Emission Regulations and Certification
Engineering and Environmental Office

Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
Phone: (248) 754-4204
Cell: (248) 797-3886
FAX: (248) 754-4207
E-Mail: leonard.kata@vw.com

From: Reineman.Martin@epamail.epa.gov [mailto:Reineman.Martin@epamail.epa.gov]
Sent: Wednesday, October 21, 2009 4:57 PM
To: Kata, Leonard
Subject: RE: Volkswagen Follow-Up Meeting

Hello Len,

I have a few questions in advance of our Nov 2nd meeting on fuel fired heaters.

Are you intending to use a fuel fired heater on both diesel and gasoline fueled vehicles for the 2011 model year?
Do you know which vehicles?

Describe the test rig you refer to in the FFH certification procedure in more detail, as in what componentry is on the test rig.

On your certification procedure flow chart, describe the "run-down" following the FFH shut-off.

For EPA approval, are the calculated equivalent emissions still being compared to the CA LEV-II standard to determine the acceptability of the FFH?

On the evap test procedure, are the emissions added to the whole-vehicle evap emissions and compared to the 2 day evaporative emission standard? Any other info on the current state of the art for FFHs with respect to evap emission compliance? In particular, do you have knowledge from your FFH supplier that suggests the evap emissions from the FFH would exceed the evap standards if the FFH was installed on a certification vehicle and the FFH run for several minutes after the end of the FTP test but before the hot soak portion of the evap test?

I was going to contact Ex. 7 at CARB and ask if they've revised any policies for FFHs. Are you aware of any changes, such as increasing the maximum ambient conditions under which the FFH may be operated? Any new guidance on CARB's policy on evap emissions from FFHs?

To: Martin Reineman/AA/USEPA/US@EPA;Linc Wehrly/AA/USEPA/US@EPA;David Good/AA/USEPA/US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; inc Wehrly/AA/USEPA/US@EPA;David Good/AA/USEPA/US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; avid Good/AA/USEPA/US@EPA;"Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]; Peter, Juergen (EASZ/1)" [juergen.peter@volkswagen.de]
Cc: "Kohnen, Christoph (VWGoA)" [christoph.kohnen@vw.com]
From: "Kata, Leonard"
Sent: Thur 10/29/2009 11:45:50 AM
Subject: Volkswagen Follow-Up Meeting - Fuel Fired Heater
[Microsoft Word - VW Request for Approval of FFH certification procedure_2009.pdf](#)
[Microsoft PowerPoint - Suggested Certification Procedure for FFH_update_05_03_2009.pdf](#)

Hello Linc, Marty, and Dave:

I have attached a document that presents the Volkswagen proposal for certification of the FFH. We wish to use this document to guide our discussions at our follow-up meeting on the FFH, scheduled for Monday, Nov. 2, 2009 at 10:00 a.m. Copies of the graphics presented at our last meeting are attached for reference.

The suggested agenda:

1. Introduction from VW
2. Summary of the past years for FFH certification
3. Open workshop discussing the proposal as attached or others.
4. Conclusion, next steps (e.g., "Guidance letter on how to certify a FFH")

I recognize that you have indicated that EPA wishes to provide, at this meeting, approval or disapproval of the procedure proposed at our last meeting. We appreciate your efforts in this regard. In either case, we would like to use the opportunity of this meeting as a "workshop" to discuss certification procedures for FFHs, and work toward a fixed process that will carry us into the future.

Best regards,

Len

Leonard W. Kata
Manager
Emission Regulations and Certification
Engineering and Environmental Office

Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326
Phone: (248) 754-4204
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FAX: (248) 754-4207
E-Mail: leonard.kata@vw.com

<<Microsoft Word - VW Request for Approval of FFH certification procedure_2009.pdf>> <<Microsoft PowerPoint - Suggested Certification Procedure for FFH_update_05_03_2009.pdf>>

To: eeo@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]
Cc: john.finneran@nhtsa.dot.gov;CN=David Good/OU=AA/O=USEPA/C=US@EPA;CN=Jeff Alson/OU=AA/O=USEPA/C=US@EPA;alan.berkowitz@nhtsa.dot.gov;CN=Ben Ellies/OU=AA/O=USEPA/C=US@EPA;Harry.Thompson@dot.gov;terry.anderson@dot.gov;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;christoph.kohnen@vw.com;richard.thomas@vw.com[]; N=David Good/OU=AA/O=USEPA/C=US@EPA;CN=Jeff Alson/OU=AA/O=USEPA/C=US@EPA;alan.berkowitz@nhtsa.dot.gov;CN=Ben Ellies/OU=AA/O=USEPA/C=US@EPA;Harry.Thompson@dot.gov;terry.anderson@dot.gov;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;christoph.kohnen@vw.com;richard.thomas@vw.com[]; N=Jeff Alson/OU=AA/O=USEPA/C=US@EPA;alan.berkowitz@nhtsa.dot.gov;CN=Ben Ellies/OU=AA/O=USEPA/C=US@EPA;Harry.Thompson@dot.gov;terry.anderson@dot.gov;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;christoph.kohnen@vw.com;richard.thomas@vw.com[]; lan.berkowitz@nhtsa.dot.gov;CN=Ben Ellies/OU=AA/O=USEPA/C=US@EPA;Harry.Thompson@dot.gov;terry.anderson@dot.gov;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;christoph.kohnen@vw.com;richard.thomas@vw.com[]; N=Ben Ellies/OU=AA/O=USEPA/C=US@EPA;Harry.Thompson@dot.gov;terry.anderson@dot.gov;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;christoph.kohnen@vw.com;richard.thomas@vw.com[]; Harry.Thompson@dot.gov;terry.anderson@dot.gov;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;christoph.kohnen@vw.com;richard.thomas@vw.com[]; terry.anderson@dot.gov;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;christoph.kohnen@vw.com;richard.thomas@vw.com[]; N=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA;christoph.kohnen@vw.com;richard.thomas@vw.com[]; hristoph.kohnen@vw.com;richard.thomas@vw.com[]; ichard.thomas@vw.com[]
From: CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US
Sent: Thur 10/29/2009 2:43:35 PM
Subject: Re: EPA CAFE letter & calculation attached - 2008 Volkswagen LT (V1.23)
[2008-0590-LT-CAFE-V123.pdf](#)

At the request of several people at the DOT, the detailed CAFE calculations report was changed to include several engine parameters. The following parameters are now included; cubic inch displacement, number of cylinders, combustion cycle, turbo-charged, super-charged, valves per cylinder, transmission, drive system, and fuel(s) used. A legend is now also included at the end of the calculations section. The requested parameters are included at the Subconfiguration, Configuration, Base Level, and Model Type levels of calculations (baseline and final calculations).

This version of the detailed calculations output file is labelled as Version 1.23. The actual calculations were not changed in any way.

The remainder of the included file is identical to the file previously sent.

Robert Peavyhouse
Compliance and Innovative Strategies Division
U.S. EPA - Office of Transportation and Air Quality
phone: (734) 214-4814
fax: (734) 214-4869
email: peavyhouse.robert@epa.gov

website: <http://www.epa.gov/nvfel/>

From: EPA-Cafe
To: eeo@vw.com, Jim Snyder/AA/USEPA/US@EPA
Cc: john.finneran@nhtsa.dot.gov, David Good/AA/USEPA/US@EPA, Jeff Alson/AA/USEPA/US@EPA, alan.berkowitz@nhtsa.dot.gov, Ben Ellies/AA/USEPA/US@EPA, Harry.Thompson@dot.gov, terry.anderson@dot.gov, Robert Peavyhouse/AA/USEPA/US@EPA, christoph.kohnen@vw.com, richard.thomas@vw.com
Date: 10/05/2009 11:37 AM
Subject: EPA CAFE letter & calculation attached - 2008 Volkswagen LT

This e-mail message forwards a signed EPA letter and Corporate Average Fuel Economy (CAFE) calculation to your office.

CONFIDENTIALITY: The cover letter and the summary information on the "CAFE report" page are not confidential. However, the information included in the calculation section of the attached PDF file contain sales information in more detail than is normally available to competitors and to the general public. Release of the calculation section of this PDF file is not authorized.

This e-mail and the Adobe Acrobat (.pdf) attachment are an official Agency action. If there is a problem with the attachment or if you are not the intended recipient, please contact your certification team representative immediately. Adobe Acrobat Reader version 5.0 or later is required to open the attached PDF document(s).

[attachment "2008 VW Final LDT Reformed CAFE STD calc-received 3-10-09.xls" deleted by Robert Peavyhouse/AA/USEPA/US] [attachment "2008-0590-LT-CAFE.pdf" deleted by Robert Peavyhouse/AA/USEPA/US]

To: christoph.kohnen@vw.com;richard.thomas@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]; ichard.thomas@vw.com;CN=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]; N=Jim Snyder/OU=AA/O=USEPA/C=US@EPA[]
Cc: richard.thomas@vw.com;john.finneran@nhtsa.dot.gov;CN=David Good/OU=AA/O=USEPA/C=US@EPA;CN=Jeff Alson/OU=AA/O=USEPA/C=US@EPA;alan.berkowitz@nhtsa.dot.gov;CN=Ben Ellies/OU=AA/O=USEPA/C=US@EPA;Harry.Thompson@dot.gov;terry.anderson@dot.gov;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]; ohn.finneran@nhtsa.dot.gov;CN=David Good/OU=AA/O=USEPA/C=US@EPA;CN=Jeff Alson/OU=AA/O=USEPA/C=US@EPA;alan.berkowitz@nhtsa.dot.gov;CN=Ben Ellies/OU=AA/O=USEPA/C=US@EPA;Harry.Thompson@dot.gov;terry.anderson@dot.gov;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]; N=David Good/OU=AA/O=USEPA/C=US@EPA;CN=Jeff Alson/OU=AA/O=USEPA/C=US@EPA;alan.berkowitz@nhtsa.dot.gov;CN=Ben Ellies/OU=AA/O=USEPA/C=US@EPA;Harry.Thompson@dot.gov;terry.anderson@dot.gov;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]; N=Jeff Alson/OU=AA/O=USEPA/C=US@EPA;alan.berkowitz@nhtsa.dot.gov;CN=Ben Ellies/OU=AA/O=USEPA/C=US@EPA;Harry.Thompson@dot.gov;terry.anderson@dot.gov;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]; lan.berkowitz@nhtsa.dot.gov;CN=Ben Ellies/OU=AA/O=USEPA/C=US@EPA;Harry.Thompson@dot.gov;terry.anderson@dot.gov;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[]; N=Ben Ellies/OU=AA/O=USEPA/C=US@EPA;Harry.Thompson@dot.gov;terry.anderson@dot.gov;CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US@EPA[];
From: CN=Robert Peavyhouse/OU=AA/O=USEPA/C=US
Sent: Thur 10/29/2009 2:45:02 PM
Subject: Re: EPA CAFE letter & calculation attached - 2008 Volkswagen IP (V1.23)
[2008-0590-IP-CAFE-V123.pdf](#)

At the request of several people at the DOT, the detailed CAFE calculations report was changed to include several engine parameters. The following parameters are now included; cubic inch displacement, number of cylinders, combustion cycle, turbo-charged, super-charged, valves per cylinder, transmission, drive system, and fuel(s) used. A legend is now also included at the end of the calculations section. The requested parameters are included at the Subconfiguration, Configuration, Base Level, and Model Type levels of calculations (baseline and final calculations).

This version of the detailed calculations output file is labelled as Version 1.23. The actual calculations were not changed in any way.

The remainder of the included file is identical to the file previously sent.

Robert Peavyhouse
Compliance and Innovative Strategies Division
U.S. EPA - Office of Transportation and Air Quality
phone: (734) 214-4814
fax: (734) 214-4869
email: peavyhouse.robert@epa.gov
website: <http://www.epa.gov/nvfel/>

From: EPA-Cafe

To: christoph.kohnen@vw.com, richard.thomas@vw.com, Jim Snyder/AA/USEPA/US@EPA
Cc: richard.thomas@vw.com, john.finneran@nhtsa.dot.gov, David Good/AA/USEPA/US@EPA, Jeff
Alson/AA/USEPA/US@EPA, alan.berkowitz@nhtsa.dot.gov, Ben Ellies/AA/USEPA/US@EPA,
Harry.Thompson@dot.gov, terry.anderson@dot.gov, Robert Peavyhouse/AA/USEPA/US@EPA
Date: 10/05/2009 03:16 PM
Subject: EPA CAFE letter & calculation attached - 2008 Volkswagen IP

This e-mail message forwards a signed EPA letter and Corporate Average Fuel Economy (CAFE) calculation to your office.

CONFIDENTIALITY: The cover letter and the summary information on the "CAFE report" page are not confidential. However, the information included in the calculation section of the attached PDF file contain sales information in more detail than is normally available to competitors and to the general public. Release of the calculation section of this PDF file is not authorized.

This e-mail and the Adobe Acrobat (.pdf) attachment are an official Agency action. If there is a problem with the attachment or if you are not the intended recipient, please contact your certification team representative immediately. Adobe Acrobat Reader version 5.0 or later is required to open the attached PDF document(s).

[attachment "2008-0590-IP-CAFE.pdf" deleted by Robert Peavyhouse/AA/USEPA/US]

To: "Reineke, Dennis" [Dennis.Reineke@vw.com]
Cc: []
Bcc: []
From: CN=Jim Snyder/OU=AA/O=USEPA/C=US
Sent: Thur 10/29/2009 9:48:52 PM
Subject: cert request

Hi Dennis, just wanted to let you know that I saw your conditional certificate request. I quickly glanced through it and it looks okay but I ran out of time to really go over it. I won;t be in friday, I will finish reviewing it on monday.

Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

To: Jim Snyder/AA/USEPA/US@EPA[]
From: Ex. 7
Sent: Mon 11/9/2009 7:34:48 PM
Subject: VW Group: MY 2010 Volkswagen Running Change/Field Fix
CBI_AVWXV03.6U46_APP_C01_R00.PDF

Ex. 7

Hello Jim,

While I was on vacation, a mixture of twenty VW and Audi field fixes were submitted to Verify. Field fix 01 for test group AVWXV03.6U46 was addressed to Dave Good instead of you. I have attached a copy for your convenience.

If you need a list of all twenty of the submitted field fix documents, let me know.

Best regards,

Ex. 7

Volkswagen Group of America, Inc.

Ex. 7

VOLKSWAGEN

GROUP OF AMERICA

Mr. David Good
Compliance and Innovative Strategies Division
Office of Mobile Sources
U. S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, MI 48105

Ex. 7

Name
Title
Department
Phone
Fax
E-Mail

November 2, 2009 Date

Subject: Running Change/Field Fix for MY 2010 Volkswagen Test Group
AVWXV03.6U46.

Dear Mr. Good,

With this letter we wish to inform the agency of a running change/field fix for the
following test group:

Test Group :	AVWXV03.6U46
Evaporative Family :	AVWXR0125246
Models :	Volkswagen CC, CC 4motion, Passat 4motion, Passat Wagon 4motion
Transmission :	S6 automatic

VOLKSWAGEN GROUP OF AMERICA, INC.
3800 HAMLIN ROAD
AUBURN HILLS, MI 48326
PHONE +1 248 754 5000

The enclosed page describes running change/field fix RF_AV3.6U46_01_09 which
is for updated transmission software to improve drivability.

If you have any questions with regard to this information please contact our office in
Auburn Hills at () **Ex. 7**

Sincerely,

Ex. 7

Volkswagen Group of America, Inc.

Ex. 7

Enclosure(s)

Subject: **Running Change / Field Fix**
R/Ch / FFix.-No.: **RF_AV3.6U46_01_09**
Test Group: **AVWXV03.6U46 (MY 2010)**
Description: **Updated ECM with new software calibration to improve driveability while downshifting manually during high engine loads.**

	ECM		
	Part.No.	Calibration No.	
Passat CC Passat Passat wagon	03H 906 032 FP	5149	A44E9AA5
Passat CC 4motion Passat 4motion Passat wagon 4motion	03H 906 032 FQ	5150	0EAE9C44

Vehicles affected: Vehicle **CC, CC 4motion, Passat 4motion, Passat Wagon 4motion**
Drive: **FWD / AWD**
Engine: **3.6l/250 hp**
Transmission: **S6**

Reason: **Engine behavior too rough while downshifting manually during high engine loads in gear 1, 2 and 3**

Request applies to: **Hardware Modification; Physical Spec.: NO**
Calibration: YES
new software calibration to address better drivability

Application Correction NO

Implementation date: **November 2009 rolling;
New ecm software calibration will be installed in production and made available for service**

Vehicles used for testing: **n.a.**

Engine Code: **BLV**

Impact on emissions: **This software change has no impact on emissions**

List of **ECM** currently certified

Engine Control Module						
Carline	Trans mission	Engine Code	Part. No.	Cal. ID software calibration ID	CVN calibration verification no	Remarks
Passat CC	L 6 FWD	BLV				
			03H 906 032 FP	4735	96639F99	SOP
				5149	A44E9AA5	FF_AV3.6U46_01_09
Passat CC Passat Passat wagon	L 6 AWD	BLV				
			03H 906 032 FQ	4736	69197E5D	SOP
				5150	0EAE9C44	FF_AV3.6U46_01_09

Running Change / Field Fix Log

Model Year: 2010
Test Group: AVWXV03.6U46
Models: Volkswagen CC, CC 4motion, Passat 4motion, Passat Wagon 4motion
Evaporative Family: AVWXR0125246

RC / FF Number	Description of Change / Reason	Date
RF_AV3.6U46_01_09	Update TCM to improve drivability during manual downshifts	Nov 02, 2009

Prefix:
RC = Running Change
RF = Running Change / Field Fix
FF = Field Fix

To: Jim Snyder/AA/USEPA/US@EPA[]
From: Ex. 7
Sent: Mon 11/9/2009 8:42:03 PM
Subject: VW Group: More Field Fixes Addressed to Dave Good
CBI_9VWXV03.2535_APP_F02_R00.PDF
CBI_AVWXV02.03SA_APP_F01_R00.PDF
CBI_AVWXV02.03UA_APP_F01_R00.pdf
Ex. 7

Hello Jim,

I found three more field fixes addressed to Dave Good. I attached copies for your convenience.

Best regards,

Ex. 7

Volkswagen Group of America, Inc.

Ex. 7

VOLKSWAGEN

GROUP OF AMERICA

Mr. David Good
Compliance and Innovative Strategies Division
Office of Mobile Sources
U. S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, MI 48105

Ex. 7

Name
Title
Department
Phone
Fax
E-Mail

October 30, 2009 Date

Subject: Field Fix for MY 2009 Volkswagen Test Group 9VWXV03.2535.

Dear Mr. Good,

With this letter we wish to inform the agency of a field fix for the following test group:

Test Group	9VWXV03.2535
Evaporative Family	9VWXR0110238
Models	Volkswagen Eos, Audi A3 quattro, TT Coupe quattro, TT Roadster quattro
Transmission	S6 (DSG Direct Shift Gearbox)

VOLKSWAGEN GROUP OF AMERICA, INC.
3800 HAMLIN ROAD
AUBURN HILLS, MI 48326
PHONE +1 248 754 5000

The enclosed page describes field fix FF_9V3.2535_02_08 which is for updated transmission software to correct erroneous high oil temperature faults.

If you have any questions with regard to this information please contact our office in Auburn Hills at **Ex. 7**

Sincerely,

Ex. 7

Enclosure(s)

Field Fix MY 2009

Subject: **Test Group:** 9VWXV03.2535

Models: Volkswagen EOS,
 Audi A3 quattro, TT quattro, TT coupe quattro

Transmission: DQ250-6F, DQ250-6A

Event: Gearbox clutch temperature sensor has the potential to falsely detect a high oil temperature.

Analysis: Wiring harness of the temperature sensor may have connector wires that were insufficiently crimped during a limited production period.

Activities: Gearbox reprogramming with updated software. The affected temperature sensor will be deactivated and replaced by an modelled temperature.

Vehicle Type	Calibration Identification		Calibration Verification	Release Date
Volkswagen EOS	02E 300 051 Q	1949	8a67	Oct 09
Audi A3 quattro	02E 300 011 DB	1952	0d6a	
Audi TT quattro	02E 300 011 DB	1951	bcc9	
Audi TT coupe quattro	02E 300 011 DB	1951	bcc9	

Impact on
Emissions: This change does not cause an impact on emissions.

Volkswagen, EASZ
10-29-2009

Running Change / Field Fix Log

Model Year: 2009
Test Group: 9VWXV03.2535
Evaporative Family: 9VWXR0110238
Models: Audi TT Coupe quattro, TT Roadster quattro

RC / FF Number	Description of Change / Reason	Date
RC_9VW3.2535_01_08	Increased curb weight / ETW for TT Coupe quattro.	SOP
FF_9V3.2535_02_09	transmission software to correct erroneous high oil temperature faults	Oct 2009

Prefix:

RC = Running Change

FF = Field Fix

RF = Running Change / Field Fix

VOLKSWAGEN

GROUP OF AMERICA

Mr. David Good
Compliance and Innovative Strategies Division
Office of Mobile Sources
U. S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, MI 48105

Ex. 7

Name
Title
Department
Phone
Fax
E-Mail

October 30, 2009 Date

Subject: Field Fix for MY 2010 Volkswagen Test Group AVWXV02.03SA.

Dear Mr. Good,

With this letter we wish to inform the agency of a field fix for the following test group:

Test Group	AVWXV02.03SA
Evaporative Family	AVWXR0110238
Models	Volkswagen Eos
Transmission	S6 (DSG Direct Shift Gearbox)

VOLKSWAGEN GROUP OF AMERICA, INC.
3800 HAMLIN ROAD
AUBURN HILLS, MI 48326
PHONE +1 248 754 5000

The enclosed page describes field fix FF_AV2.03SA_01_09 which is for updated transmission software to correct erroneous high oil temperature faults.

If you have any questions with regard to this information please contact our office in Auburn Hills at: **Ex. 7**

Sincerely,

Ex. 7

Enclosure(s)

Field Fix MY 2010

Subject: **Test Group:** AVWXV02.03SA
Models: Volkswagen EOS
Transmission: DQ250-6F

Event: Gearbox clutch temperature sensor has the potential to falsely detect a high oil temperature.

Analysis: Wiring harness of the temperature sensor may have connector wires that were insufficiently crimped during a limited production period.

Activities: Gearbox reprogramming with updated software. The affected temperature sensor will be deactivated and replaced by a modelled temperature.

Vehicle Type	Calibration Identification		Calibration Verification	Release Date
Volkswagen EOS	02E 300 051 P	1940	ffbb	Oct 09

Impact on
Emissions: This change does not cause an impact on emissions.

Volkswagen, EASZ
10-29-2009

Running Change / Field Fix Log

Model Year: 2010
Test Group: AVWXV02.03UA
Models: Volkswagen Eos, CC, Passat, Passat Wagon
Evaporative Family: AVWXR0110238

RC / FF Number	Description of Change / Reason	Date
FF_AV2.03UA_01_09	DSG transmission software update for erroneous high oil temp faults.	Oct 30, 2009

Prefix:

RC = Running Change
RF = Running Change / Field Fix
FF = Field Fix

VOLKSWAGEN

GROUP OF AMERICA

Mr. David Good
Compliance and Innovative Strategies Division
Office of Mobile Sources
U. S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, MI 48105

Ex. 7

Name
Title
Department
Phone
Fax
E-Mail

October 30, 2009 Date

Subject: Field Fix for MY 2010 Volkswagen Test Group AVWXV02.03UA.

Dear Mr. Good,

With this letter we wish to inform the agency of a field fix for the following test group:

Test Group	AVWXV02.03UA
Evaporative Family	AVWXR0110238
Models	Volkswagen Eos
Transmission	S6 (DSG Direct Shift Gearbox)

VOLKSWAGEN GROUP OF AMERICA, INC.
3800 HAMLIN ROAD
AUBURN HILLS, MI 48326
PHONE +1 248 754 5000

The enclosed page describes field fix FF_AV2.03UA_01_09 which is for updated transmission software to correct erroneous high oil temperature faults.

If you have any questions with regard to this information please contact our office in Auburn Hills at **Ex. 7**

Sincerely,

Ex. 7

Enclosure(s)

Field Fix MY 2010

Subject: **Test Group:** AVWXV02.03UA
Models: Volkswagen EOS
Transmission: DQ250-6F

Event: Gearbox clutch temperature sensor has the potential to falsely detect a high oil temperature.

Analysis: Wiring harness of the temperature sensor may have connector wires that were insufficiently crimped during a limited production period.

Activities: Gearbox reprogramming with updated software. The affected temperature sensor will be deactivated and replaced by a modelled temperature.

Vehicle Type	Calibration Identification		Calibration Verification	Release Date
Volkswagen EOS	02E 300 051 P	1940	ffbb	Oct 09

Impact on
Emissions: This change does not cause an impact on emissions.

Volkswagen, EASZ
10-29-2009

Running Change / Field Fix Log

Model Year: 2010
Test Group: AVWXV02.03UA
Models: Volkswagen Eos, CC, Passat, Passat Wagon
Evaporative Family: AVWXR0110238

RC / FF Number	Description of Change / Reason	Date
FF_AV2.03UA_01_09	DSG transmission software update for erroneous high oil temp faults.	Oct 30, 2009

Prefix:

RC = Running Change

RF = Running Change / Field Fix

FF = Field Fix

To: robert.hart@vw.com[]
Cc: []
Bcc: []
From: CN=Jim Snyder/OU=AA/O=USEPA/C=US
Sent: Tue 11/10/2009 8:38:32 PM
Subject: Fw: VW certification information request

Bob, a chemical engineer in the Advanced Technology Division is reviewing the 2010 TDI diesel in the Jetta, test group AVWXV02.0U5N. He asked me for the details on the aftertreatment and I couldn't find some of it in the certificate application documentation as required. Specifically information on the type of catalysts, catalyst loadings/volumes, DPF volume, and LNT loadings. Please supply the requested info, thanks.

Here is his note:

Jim hi, ... I was wondering if you could look up the 2010 Jetta and give me the particulars on the aftertreatment, type of converters/DPFs/LNT, catalyst loadings, volumes, etc, ... Lynn Sohacki told me you were the VW contact, thanks, Greg

Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

To: Jim Snyder/AA/USEPA/US@EPA[]
From: "Hart, Robert (VWoA)"
Sent: Tue 11/10/2009 8:52:31 PM
Subject: RE: VW certification information request

Hello Jim,

I am sadly mistaken. I don't have Veteran's Day off. I was looking at the wrong calendar.

Bob

From: Snyder.Jim@epamail.epa.gov [mailto:Snyder.Jim@epamail.epa.gov]
Sent: Tuesday, November 10, 2009 3:39 PM
To: Hart, Robert (VWoA)
Subject: Fw: VW certification information request

Bob, a chemical engineer in the Advanced Technology Division is reviewing the 2010 TDI diesel in the Jetta, test group AVWXV02.0U5N. He asked me for the details on the aftertreatment and I couldn't find some of it in the certificate application documentation as required. Specifically information on the type of catalysts, catalyst loadings/volumes, DPF volume, and LNT loadings. Please supply the requested info, thanks.

Here is his note:

Jim hi, ... I was wondering if you could look up the 2010 Jetta and give me the particulars on the aftertreatment, type of converters/DPFs/LNT, catalyst loadings, volumes, etc, ... Lynn Sohacki told me you were the VW contact, thanks, Greg

Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

To: Jim Snyder/AA/USEPA/US@EPA[]
From: "Hart, Robert (VWoA)"
Sent: Fri 11/13/2009 3:09:39 PM
Subject: VW Group: Requested Information for MY 2010 2.0l Diesel Aftertreatment
Volkswagen-MY2010 Golf-Jetta diesel OC-PTOX-NSC characteristics.doc
mailto:robert.hart@vw.com

Hello Jim,

Please let me know if the attached information is sufficient.

Best regards,

Bob Hart

Robert Hart

Emissions & Regulatory Analyst

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4224

Fax: 248 754 4207

mailto:robert.hart@vw.com

To: Jim Snyder/AA/USEPA/US@EPA[]
From: "Hart, Robert (VWoA)"
Sent: Mon 11/16/2009 3:35:02 PM
Subject: Confirmatory Test Schedule for EDV: 462 00184/10
<mailto:robert.hart@vw.com>

Hello Jim,

Germany is having problems with shipping and need to delay the confirmatory test for EDV: 462 00184/10 by a week. The current schedule for the test is 12/2/2009.

Please reschedule the test for this vehicle for the second week of December if possible.

Best regards,

Bob Hart

Robert Hart

Emissions & Regulatory Analyst

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: 248 754 4224

Fax: 248 754 4207

<mailto:robert.hart@vw.com>

To: David Good/AA/USEPA/US@EPA; "Ex. 7 @ARB" Ex. 7 @arb.ca.gov; Ex. 7
Ex. 7 @ARB" Ex. 7 @arb.ca.gov]
Cc: Joel Ball/AA/USEPA/US@EPA; Ex. 7
Ex. 7
From: Ex. 7
Sent: Mon 12/7/2009 4:34:18 PM
Subject: MY2005 - Full Useful Life Vehicle for Test Group 5AD XV02.0352
<mailto:Ex. 7>
<http://www.vw.com>
<http://www.audiusa.com>

Hallo Dave, Hallo Ex. 7,

As we already talked on the phone, we have difficulties to find the full useful life vehicles for one test groups in MY2005.

For the procurement of the vehicles is our contractor California-Environmental-Engineering (CEE) responsible.

The following describes the actual situation of the test group.

- Test-Group 5AD XV02.0352

There are 4 vehicles to be tested in this group, 2 vehicles warm and 2 cold weather.

So far we have tested following vehicles:

- VIN# Ex. 6 from CA with a mileage of 59,029 miles__Vehicle passed all Standards
- VIN# Ex. 6 from CO with a mileage of 52,410 miles__Vehicle passed all Standards
- VIN# Ex. 6 from MI with a mileage of 88,975 miles__Vehicle passed all Standards

In order to get a vehicle with a odometer over 90,000 miles for the full useful life test, we already have sent a second mailing out in CA and we mailed to all Customers in MI without getting a successful respond.

The highest mileage that we have on a vehicle available for this test group at the moment is the third vehicle mentioned above, with 88,975 miles.

Dave Good agreed on the phone that he will accept this vehicle as a full useful life.

@ **Ex. 7**

Dave asked me to send the information about the mileage of the vehicles tested so far in this test group to all the parties involved, and also to get your approval.

Meanwhile I will report the vehicle in Verify as a full useful life.

Please let me know as soon as you can what your decision/opinion is.

Thank you all for your understanding and support,

Ex. 7

Ex. 7

Volkswagen Group of America, Inc.
Engineering and Environmental Office

Ex. 7

<http://www.vw.com>
<http://www.audiusa.com>

To: Jim Snyder/AA/USEPA/US@EPA[]
From: "Hart, Robert (VWoA)"
Sent: Tue 12/15/2009 6:03:02 PM
Subject: VW Group: Request for an Extension for Submission of the MY 2009 Volkswagen Group Common Sections.
CBI 9VWX COMMON RFA APP R00.PDF

Hello Jim,

The attached letter was also submitted through the VERIFY System.

We are requesting a time extension for submission of the final update of the MY 2009 Volkswagen Group Common Sections. (See attachment.)

Best regards,

Bob Hart

Robert Hart

Engineering and Environmental Office

Volkswagen Group of America, Inc.

3800 Hamlin Road

Auburn Hills, MI 48326

Phone: (248) 754-4224

Fax: (248) 754-4207

E-mail: robert.hart@vw.com

VOLKSWAGEN

GROUP OF AMERICA

Mr. Jim Snyder
Compliance and Innovative Strategies Division
Office of Mobile Sources
U. S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, MI 48105

Leonard W. Kata Name
Manager – Emis. Cert. Title
EEO Department
248-754-4204 Phone
248-754-4207 Fax
leonard.kata@vw.com E-Mail

December 15, 2009 Date


Subject: Request for an Extension for Submission of the MY 2009 Volkswagen Group
Common Sections.

Dear Mr. Snyder,

We are requesting an extension of up to 90 days, as allowed by regulation, for the submission of the Volkswagen Group model year 2009 Common Sections. This request is necessary to allow us to add the final sales figures for the 2009 model year. All other model year 2009 applications will be submitted by the December 31, 2009 deadline. We will submit the 2009 Common Sections with as short of a delay as possible.

If you have any questions with regard to this request, please contact our office in Auburn Hills at (248) 754-4215 or (248) 754-4224.

Sincerely,



Leonard W. Kata
Volkswagen Group of America, Inc.

VOLKSWAGEN GROUP OF AMERICA, INC.
3800 HAMLIN ROAD
AUBURN HILLS, MI 48326
PHONE 41 248 754 5000

Engineering and Environmental Office

Enclosure(s)

To: "Hart, Robert (VWoA)" [Robert.Hart@vw.com]
Cc: []
Bcc: []
From: CN=Jim Snyder/OU=AA/O=USEPA/C=US
Sent: Wed 12/16/2009 10:16:39 PM
Subject: Re: VW Group: Request for an Extension for Submission of the MY 2009 Volkswagen Group Common Sections.

That is acceptable timing.

Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

From: "Hart, Robert (VWoA)" <Robert.Hart@vw.com>
To: Jim Snyder/AA/USEPA/US@EPA
Date: 12/15/2009 01:03 PM
Subject: VW Group: Request for an Extension for Submission of the MY 2009 Volkswagen Group Common Sections.

Hello Jim,

The attached letter was also submitted through the VERIFY System.
We are requesting a time extension for submission of the final update of the MY 2009 Volkswagen Group Common Sections. (See attachment.)

Best regards,

Bob Hart

Robert Hart

Engineering and Environmental Office

Volkswagen Group of America, Inc.
3800 Hamlin Road
Auburn Hills, MI 48326

Phone: (248) 754-4224
Fax: (248) 754-4207
E-mail: robert.hart@vw.com
[attachment "CBI_9VWX_COMMON_RFA_APP_R00.PDF" deleted by Jim Snyder/AA/USEPA/US]

To: Linc Wehrly/AA/USEPA/US@EPA[]
Cc: "Kohnen, Christoph (VWGoA)" [christoph.kohnen@vw.com]
From: "Johnson, Stuart"
Sent: Mon 12/21/2009 8:29:57 PM
Subject: FW:
20091221123434762.pdf

Hello Linc,

Attached please find the dioxin report we discussed earlier today.
Please let me know if you have any questions.

If we don't talk have a good holiday.

Best Regards,

Stuart

To: "Reineke, Dennis" [Dennis.Reineke@vw.com]
Cc: []
Bcc: []
From: CN=Jim Snyder/OU=AA/O=USEPA/C=US
Sent: Tue 12/22/2009 8:54:42 PM
Subject: VW confirmatory EPA shed test results

Haven't seen anything official yet but I heard it passed at .1929g

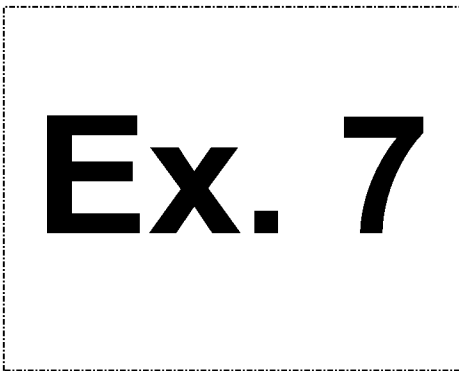
Jim Snyder
Light-Duty Vehicle Group
Compliance and Innovative Strategies Division
United States Environmental Protection Agency
(734) 214-4946
snyder.jim@epa.gov

To: Jim Snyder/AA/USEPA/US@EPA[]
From: Ex. 7
Sent: Thur 12/24/2009 12:53:31 AM
Subject: VW Group: MY 2000 Audi Field Fixes
CBI YAD XV01.8332 APP F02 R00.PDF
CBI YAD XV01.8336 APP F03 R00.PDF

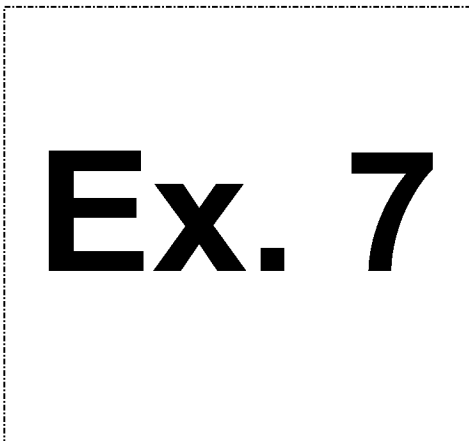
Hello Jim,

Attached you will find two MY 2000 Audi ignition coil related field fixes. MY 2000 is too old to upload to the VERIFY System.

Best regards,



Volkswagen Group of America, Inc.



VOLKSWAGEN

GROUP OF AMERICA

Mr. Jim Snyder
Compliance and Innovative Strategies Division
Office of Mobile Sources
U. S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, MI 48105

Ex. 7

Name
Title
Department
Phone
Fax
E-Mail

December 22, 2009 Date

Subject: Field Fix for MY 2000 Audi Test Group YAD XV01.8332

Dear Mr. Snyder,

With this letter we wish to inform the agency of a Field Fix for the following test group:

VOLKSWAGEN GROUP OF AMERICA, INC.
3800 HAMLIN ROAD
AUBURN HILLS, MI 48326
PHONE +1 248 754 5000

Test Group ;	YAD XV01.8332
Models	All
Transmission	All

The enclosed pages describe Field Fix FF_YA1.8332_02_09 which introduces new replacement ignition coil.

If you have any questions with regard to this information please contact our office in Auburn Hills at **Ex. 7**

Sincerely,

Ex. 7

Enclosure(s)

Field Fix MY 2000

Subject:

Field Fix Nr.: FF_YA1.8332_02_09
Model Year 2000
Test Group: YAD XV01.8332
Models: all
Transmission: all

Event:

Customer complaint: MIL is flashing or constantly illuminated.

Analysis:

DTCs for misfire in one or more cylinders are stored in the ECM.
The misfire condition can be caused by an inoperative ignition coil.

Activities:

A new generation of ignition coils is being installed in production.
The improved ignition coil will be used in the workshop to satisfy customer.

Model	Part number new	Release Date
all	06A 905 115 D	Nov-09

Impact on

Emissions:

This change does not cause an impact on emissions.

AUDI AG
12-21-2009

Running Change / Field Fix Log

Model Year: 2000
Test Group: YAD XV01.8332
Evaporative Family: YADXR0140232
Models: Audi A4, A4 quattro
VW Passat, Passat Wagon

RC / FF Number	Description of Change / Reason	Date
FF_YA1.8332_01_09	New software calibration with and improved catalyst monitor calibration, an adjustment to diagnostic strategy air intake volume/time, an adjusted misfire monitor for part protection and an adjusted EVAP monitor below 40°F.	Feb. 24. 2009
FF_YA1.8332_02_09	Replacement Ignition Coil	December 2009

Prefixes:

RC = Running Change

RF = Running Change/Field Fix

FF = Field Fix

VOLKSWAGEN

GROUP OF AMERICA

Mr. Jim Snyder
Compliance and Innovative Strategies Division
Office of Mobile Sources
U. S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, MI 48105

Ex. 7

Name
Title
Department
Phone
Fax
E-Mail

December 22, 2009 Date

Subject: Field Fix for MY 2000 Audi Test Group YAD XV01.8336

Dear Mr. Snyder,

With this letter we wish to inform the agency of a Field Fix for the following test group:

VOLKSWAGEN GROUP OF AMERICA, INC.
3800 HAMLIN ROAD
AUBURN HILLS, MI 48326
PHONE +1 248 754 5000

Test Group ;	YAD XV01.8336
Models	All
Transmission	All

The enclosed pages describe Field Fix FF_YA1.8336_03_09 which introduces new replacement ignition coil.

If you have any questions with regard to this information please contact our office in Auburn Hills at **Ex. 7**

Sincerely,

Ex. 7

Enclosure(s)

Field Fix MY 2000-2002

Subject:

Field Fix Nr.:	FF_YA1.8336_03_09	FF_1A1.8336_02_09
Model Year	2000	2001
Test Group:	YAD XV01.8336	1AD XV01.8336
Models:	all	all
Transmission:	all	all

Field Fix Nr.:	FF_2A1.8336_02_09
Model Year	2002
Test Group:	2AD XV01.8336
Models:	all
Transmission:	all

Event: Customer complaint: MIL is flashing or constantly illuminated.

Analysis: DTCs for misfire in one or more cylinders are stored in the ECM.
The misfire condition can be caused by an inoperative ignition coil.

Activities: A new generation of ignition coils is being installed in production.
The improved ignition coil will be used in the workshop to satisfy customer.

Vehicle Type	Part number new	Release Date
all	06A 905 115 D	Nov-09

Impact on
Emissions: This change does not cause an impact on emissions.

AUDI AG
12-21-2009

Running Change / Field Fix Log

Model Year: 2000
Test Group: YAD XV01.8336
Evaporative Family: VW: 1ADXR0110234
Audi: 1ADXR0130242
Models: VW Golf, Jetta, New Beetle
Audi TT, TT Roadster

RC / FF Number	Description of Change / Reason	Date
RC_YA1.8336_01_99	Addition of Audi TT Quattro	5/10/1999
RC-YA1.8336_02_99	Addition of several carlines and engine codes	10/12/1999
FF_YA1.8336_03_09	Replacement Ignition Coil	December 2009

Prefixes:
RC = Running Change
RF = Running Change/Field Fix
FF = Field Fix

To: Jim Snyder/AA/USEPA/US@EPA[]
From: Ex. 7
Sent: Thur 12/24/2009 12:53:43 AM
Subject: VW Group: MY 2001 Audi Field Fixes
CBI 1AD XV01.8336 APP F02 R00.PDF
CBI 1AD XV01.8342 APP F03 R00.PDF
CBI 1AD XV01.8346 APP F05 R00.PDF
CBI 1AD XV01.8347 APP F01 R00.PDF

Hello Jim,

Attached you will find four MY 2001 Audi ignition coil related field fixes. MY 2001 is too old to upload to the VERIFY System.

Best regards,

Ex. 7

Volkswagen Group of America, Inc.

Ex. 7

VOLKSWAGEN

GROUP OF AMERICA

Mr. Jim Snyder
Compliance and Innovative Strategies Division
Office of Mobile Sources
U. S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, MI 48105

Ex. 7

Name
Title
Department
Phone
Fax
E-Mail

December 22, 2009 Date

Subject: Field Fix for MY 2001 Audi Test Group 1AD XV01.8336

Dear Mr. Snyder,

With this letter we wish to inform the agency of a Field Fix for the following test group:

VOLKSWAGEN GROUP OF AMERICA, INC.
3800 HAMLIN ROAD
AUBURN HILLS, MI 48326
PHONE +1 248 754 5000

Test Group ;	1AD XV01.8336
Models	All
Transmission	All

The enclosed pages describe Field Fix FF_1A1.8336_02_09 which introduces new replacement ignition coil.

If you have any questions with regard to this information please contact our office in Auburn Hills at **Ex. 7**

Sincerely,

Ex. 7

Enclosure(s)

Field Fix MY 2000-2002

Subject:

Field Fix Nr.:	FF_YA1.8336_03_09	FF_1A1.8336_02_09
Model Year	2000	2001
Test Group:	YAD XV01.8336	1AD XV01.8336
Models:	all	all
Transmission:	all	all

Field Fix Nr.:	FF_2A1.8336_02_09
Model Year	2002
Test Group:	2AD XV01.8336
Models:	all
Transmission:	all

Event: Customer complaint: MIL is flashing or constantly illuminated.

Analysis: DTCs for misfire in one or more cylinders are stored in the ECM.
The misfire condition can be caused by an inoperative ignition coil.

Activities: A new generation of ignition coils is being installed in production.
The improved ignition coil will be used in the workshop to satisfy customer.

Vehicle Type	Part number new	Release Date
all	06A 905 115 D	Nov-09

Impact on
Emissions: This change does not cause an impact on emissions.

AUDI AG
12-21-2009

Running Change / Field Fix Log

Model Year: 2001
Test Group: 1ADXV01.8336
Evaporative Family: VW: 1ADXR0110234
Audi: 1ADXR0130242
Models: VW Golf, Jetta, New Beetle
Audi TT, TT Roadster

RC / FF Number	Description of Change / Reason	Date
RC_1A1.8336_02_09	Addition of Golf/GTI/Jetta	9/20/2000
FF_1A1.8336_02_09	Replacement Ignition Coil	December 2009

Prefixes:
RC = Running Change
RF = Running Change/Field Fix
FF = Field Fix

VOLKSWAGEN

GROUP OF AMERICA

Mr. Jim Snyder
Compliance and Innovative Strategies Division
Office of Mobile Sources
U. S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, MI 48105

Ex. 7

Name
Title
Department
Phone
Fax
E-Mail

December 21, 2009 Date

Subject: Field Fix for 2001 Audi Test Group 1AD XV01.8342

Dear Mr. Snyder,

With this letter we wish to inform the agency of a Field Fix for the following test group:

VOLKSWAGEN GROUP OF AMERICA, INC.
3800 HAMLIN ROAD
AUBURN HILLS, MI 48326
PHONE +1 248 754 5000

Test Group ;	1AD XV01.8342
Models	All
Transmission	All

The enclosed pages describe Field Fix FF_1A1.8342_03_09 which introduces new replacement ignition coil.

If you have any questions with regard to this information please contact our office in Auburn Hills at **Ex. 7**

Sincerely,

Ex. 7

Enclosure(s)

Field Fix MY 2001-2006

Subject:

Field Fix Nr.:	FF_1A1.8342_03_09	FF_2A1.8342_19_09
Model Year	2001	2002
Test Group:	1ADXV01.8342	2ADXV01.8342
Models:	all	all
Transmission:	all	all

Field Fix Nr.:	FF_3A1.8342_11_09	FF_4A1.8342_08_09
Model Year	2003	2004
Test Group:	3ADXV01.8342	4ADXV01.8342
Models:	all	all
Transmission:	all	all

Field Fix Nr.:	FF_5A1.8342_05_09	FF_6A1.8342_02_09
Model Year	2005	2006
Test Group:	5ADXV01.8342	6ADXV01.8342
Models:	all	all
Transmission:	all	all

Event:

Customer complaint: MIL is flashing or constantly illuminated.

Analysis:

DTCs for misfire in one or more cylinders are stored in the ECM.
The misfire condition can be caused by an inoperative ignition coil.

Activities:

A new generation of ignition coils is being installed in production.
The improved ignition coil will be used in the workshop to satisfy customer.

Model	Part number new	Release Date
all	06A 905 115 D	Nov-09

Impact on

Emissions:

This change does not cause an impact on emissions.

AUDI AG
12-21-2009

Running Change / Field Fix Log

Model Year: 2001
Test Group: 1AD XV01.8342
Evaporative Family: 1AD XR0140232

Models: Audi A4, A4 quattro
VW Passat

RC / FF Number	Description of Change / Reason	Date
RC_1A1.8342_01_00	New software calibration for increase to 170 H.P. and increased ETW to 3625 lbs. for new Passat facelift model.	Oct. 4, 2000
FF_1A1.8342_02_09	New software calibration with and improved catalyst monitor calibration, an adjustment to diagnostic strategy air intake volume/time, an adjusted misfire monitor for part protection and an adjusted EVAP monitor below 40°F.	Feb. 24, 2009
FF_1A1.8342_03_09	Replacement Ignition Coils	December 2009

Prefix:
RC = Running Change
RF = Running Change / Field Fix
FF = Field Fix

VOLKSWAGEN

GROUP OF AMERICA

Mr. Jim Snyder
Compliance and Innovative Strategies Division
Office of Mobile Sources
U. S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, MI 48105

Ex. 7

Name
Title
Department
Phone
Fax
E-Mail

December 22, 2009 Date

Subject: Field Fix for MY 2001 Audi Test Group 1AD XV01.8346

Dear Mr. Snyder,

With this letter we wish to inform the agency of a Field Fix for the following test group:

VOLKSWAGEN GROUP OF AMERICA, INC.
3800 HAMELIN ROAD
AUBURN HILLS, MI 48326
PHONE +1 248 754 5000

Test Group ;	1AD XV01.8346
Models	All
Transmission	All

The enclosed pages describe Field Fix FF_1A1.8346_05_09 which introduces new replacement ignition coil.

If you have any questions with regard to this information please contact our office in Auburn Hills at: Ex. 7

Sincerely,

Ex. 7

Enclosure(s)

Field Fix MY 2001-2006

Subject:

Field Fix Nr.:	FF_1A1.8346_05_09	FF_2A1.8346_09_09
Model Year	2001	2002
Test Group:	1AD XV01.8346	2AD XV01.8346
Models:	all	all
Transmission:	all	all

Field Fix Nr.:	FF_3A1.8346_09_09	FF_4A1.8346_04_09
Model Year	2003	2004
Test Group:	3AD XV01.8346	4AD XV01.8346
Models:	all	all
Transmission:	all	all

Field Fix Nr.:	FF_5A1.8346_01_09	FF_6A1.8346_01_09
Model Year	2005	2006
Test Group:	5AD XV01.8346	6AD XV01.8346
Models:	all	all
Transmission:	all	all

Event: Customer complaint: MIL is flashing or constantly illuminated.

Analysis: DTCs for misfire in one or more cylinders are stored in the ECM.
The misfire condition can be caused by an inoperative ignition coil.

Activities: A new generation of ignition coils is being installed in production.
The improved ignition coil will be used in the workshop to satisfy customer.

Model	Part number new	Release Date
all	06A 905 115 D	Nov-09

Impact on
Emissions: This change does not cause an impact on emissions.

AUDI AG
12-21-2009

Running Change / Field Fix Log

Model Year: 2001
 Test Group: 1ADXV01.8346
 Evaporative Family: VW: 1ADXR0110234
 Audi: 1ADXR0130242
 Models: VW Golf, Jetta, New Beetle
 Audi TT, TT Roadster

RC / FF Number	Description of Change / Reason	Date
01	Addition of Audi TT and TT Roadster models, Addition of Evaporative Family 1ADXR0130242	August 15, 2000
FF01	Optimization of software calibration to prevent misfire during cold start.- Volkswagen Models	June 26, 2002
F04ECM_1-3mAD	ECM software change - misfire prevention	April 7, 2003
FF_1A1.8346_04_07	New ECM calibration. Adjusted Catalyst Monitor avoiding false MIL illumination. Adjusted Misfire Monitor to improve part protection.	August 2007 rolling
FF_1A1.8346_05_09	Replacement Ignition Coil	December 2009

Prefixes:
 RC = Running Change
 RF = Running Change/Field Fix
 FF = Field Fix

VOLKSWAGEN

GROUP OF AMERICA

Mr. Jim Snyder
Compliance and Innovative Strategies Division
Office of Mobile Sources
U. S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, MI 48105

Ex. 7

Name
Title
Department
Phone
Fax
E-Mail

December 22, 2009 Date

Subject: Field Fix for MY 2001 Audi Test Group 1AD XV01.8347

Dear Mr. Snyder,

With this letter we wish to inform the agency of a Field Fix for the following test group:

VOLKSWAGEN GROUP OF AMERICA, INC.
3800 HAMLIN ROAD
AUBURN HILLS, MI 48326
PHONE +1 248 754 5000

Test Group ;	1AD XV01.8347
Models	All
Transmission	All

The enclosed pages describe Field Fix FF_1A1.8347_01_09 which introduces new replacement ignition coil.

If you have any questions with regard to this information please contact our office in Auburn Hills at: **Ex. 7**

Sincerely,

Ex. 7

Enclosure(s)

Field Fix MY 2001-2002

Subject:

Field Fix Nr.:	FF_1A1.8347_01_09	FF_2A1.8347_01_09
Model Year	2001	2002
Test Group:	1AD XV01.8347	2AD XV01.8347
Models:	all	all
Transmission:	all	all

Event: Customer complaint: MIL is flashing or constantly illuminated.

Analysis: DTCs for misfire in one or more cylinders are stored in the ECM.
The misfire condition can be caused by an inoperative ignition coil.

Activities: A new generation of ignition coils is being installed in production.
The improved ignition coil will be used in the workshop to satisfy customer.

Vehicle Type	Part number new	Release Date
all	06A 905 115 D	Nov-09

Impact on
Emissions: This change does not cause an impact on emissions.

AUDI AG
12-21-2009

Running Change / Field Fix Log

Model Year: 2001
Test Group: 1AD XV01.8347
Evaporative Family: Audi: 1AD XR0130242

Models:
Audi TT Quattro

RC / FF Number	Description of Change / Reason	Date
FF_1A1.8347_01_09	Replacement Ignition Coil	December 2009

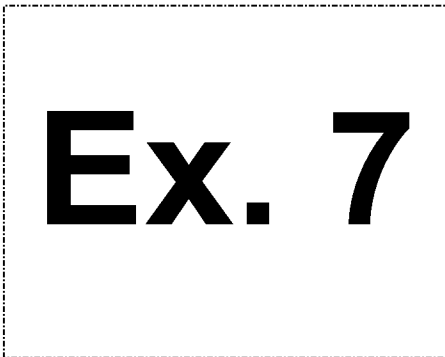
Prefixes:
RC = Running Change
RF = Running Change/Field Fix
FF = Field Fix

To: Jim Snyder/AA/USEPA/US@EPA[]
From: Ex. 7
Sent: Thur 12/24/2009 12:53:51 AM
Subject: VW Group: MY 2002 Audi Field Fixes
CBI 2AD XV01.8336 APP F02 R00.PDF
CBI 2AD XV01.8342 APP F19 R00.PDF
CBI 2AD XV01.8346 APP F09 R00.PDF
CBI 2AD XV01.8347 APP F01 R00.PDF
CBI 2AD XV03.0344 APP F03 R00.PDF

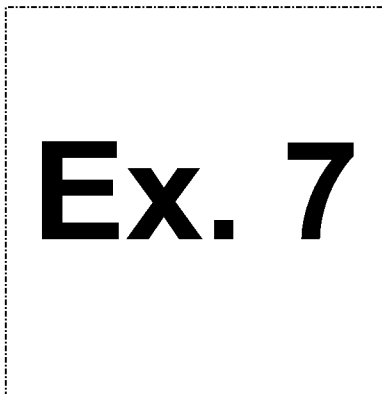
Hello Jim,

Attached you will find five MY 2002 Audi ignition coil related field fixes. MY 2002 is too old to upload to the VERIFY System.

Best regards,



Volkswagen Group of America, Inc.



VOLKSWAGEN

GROUP OF AMERICA

Mr. Jim Snyder
Compliance and Innovative Strategies Division
Office of Mobile Sources
U. S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, MI 48105

Ex. 7

Name
Title
Department
Phone
Fax
E-Mail

December 22, 2009 Date

Subject: Field Fix for MY 2002 Audi Test Group 2AD XV01.8336

Dear Mr. Snyder,

With this letter we wish to inform the agency of a Field Fix for the following test group:

VOLKSWAGEN GROUP OF AMERICA, INC.
3800 HAMLIN ROAD
AUBURN HILLS, MI 48326
PHONE +1 248 754 5000

Test Group ;	2AD XV01.8336
Models	All
Transmission	All

The enclosed pages describe Field Fix FF_2A1.8336_02_09 which introduces new replacement ignition coil.

If you have any questions with regard to this information please contact our office in Auburn Hills at **Ex. 7**

Sincerely,

Ex. 7

Enclosure(s)

Field Fix MY 2000-2002

Subject:

Field Fix Nr.:	FF_YA1.8336_03_09	FF_1A1.8336_02_09
Model Year	2000	2001
Test Group:	YAD XV01.8336	1AD XV01.8336
Models:	all	all
Transmission:	all	all

Field Fix Nr.:	FF_2A1.8336_02_09
Model Year	2002
Test Group:	2AD XV01.8336
Models:	all
Transmission:	all

Event: Customer complaint: MIL is flashing or constantly illuminated.

Analysis: DTCs for misfire in one or more cylinders are stored in the ECM.
The misfire condition can be caused by an inoperative ignition coil.

Activities: A new generation of ignition coils is being installed in production.
The improved ignition coil will be used in the workshop to satisfy customer.

Vehicle Type	Part number new	Release Date
all	06A 905 115 D	Nov-09

Impact on
Emissions: This change does not cause an impact on emissions.

AUDI AG
12-21-2009

Running Change / Field Fix Log

Model Year: 2002
Test Group: 2ADXV01.8336
Evaporative Family: VW: 2ADXR0110234
Audi: 2ADXR0130242
Models: VW Golf, Jetta, New Beetle
Audi TT, TT Roadster

RC / FF Number	Description of Change / Reason	Date
RC_2A1.8336_01_02	The addition of ALMS model with 18 inch wheels and 225/40R18 tires. Increase of Equivalent Test Weight(ETW) of TT Roadster. The addition of 3.31 final drive	4/20/2002
FF_2A1.8336_02_09	Replacement Ignition Coil	December 2009

Prefixes:
RC = Running Change
RF = Running Change/Field Fix
FF = Field Fix

VOLKSWAGEN

GROUP OF AMERICA

Mr. Jim Snyder
Compliance and Innovative Strategies Division
Office of Mobile Sources
U. S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, MI 48105

Ex. 7

Name
Title
Department
Phone
Fax
E-Mail

December 21, 2009 Date

Subject: Field Fix for 2002 Audi Test Group 2AD XV01.8342

Dear Mr. Snyder,

With this letter we wish to inform the agency of a Field Fix for the following test group:

VOLKSWAGEN GROUP OF AMERICA, INC.
3800 HAMLIN ROAD
AUBURN HILLS, MI 48326
PHONE +1 248 754 5000

Test Group ;	2AD XV01.8342
Models	All
Transmission	All

The enclosed pages describe Field Fix FF_2A1.8342_19_09 which introduces new replacement ignition coil.

If you have any questions with regard to this information please contact our office in Auburn Hills at Ex. 7

Sincerely,

Ex. 7

Enclosure(s)

Field Fix MY 2001-2006

Subject:

Field Fix Nr.:	FF_1A1.8342_03_09	FF_2A1.8342_19_09
Model Year	2001	2002
Test Group:	1AD XV01.8342	2AD XV01.8342
Models:	all	all
Transmission:	all	all

Field Fix Nr.:	FF_3A1.8342_11_09	FF_4A1.8342_08_09
Model Year	2003	2004
Test Group:	3AD XV01.8342	4AD XV01.8342
Models:	all	all
Transmission:	all	all

Field Fix Nr.:	FF_5A1.8342_05_09	FF_6A1.8342_02_09
Model Year	2005	2006
Test Group:	5AD XV01.8342	6AD XV01.8342
Models:	all	all
Transmission:	all	all

Event: Customer complaint: MIL is flashing or constantly illuminated.

Analysis: DTCs for misfire in one or more cylinders are stored in the ECM.
The misfire condition can be caused by an inoperative ignition coil.

Activities: A new generation of ignition coils is being installed in production.
The improved ignition coil will be used in the workshop to satisfy customer.

Model	Part number new	Release Date
all	06A 905 115 D	Nov-09

Impact on
Emissions: This change does not cause an impact on emissions.

AUDI AG
12-21-2009

Running Change / Field Fix Log

Model Year: 2002
 Test Group: 2ADXV01.8342
 Evaporative Family: 2ADXR0140262
 2ADXR0140232

Models: Audi A4, A4 Cabriolet, A4 quattro, A4 Avant, A4 Avant quattro
 VW Passat / Passat Wagon

RC / FF Number	Description of Change / Reason	Date
RC_2A1.8342_02_01	Addition of the new 6 th generation A4	04/17/01
RC_2A1.8342_03_01	Addition of A4, A4 quattro models	06/12/01
RC_2A1.8342_04_01	Testing of the automatic in Sport and Tiptronic modes.	10/22/01
RC_2A1.8342_05_01	Addition of A4 Avant quattro model	12/21/01
RF_2A1.8342_06_02	Misfire during 1 st 1000 revolutions after cold start related to fuel quality	06/11/02
RF_2A1.8342_07_02	Calibration revision to prevent misfire after cold starts	06/11/02
FF_2A1.8342_08_03	New TCM software level to improve shift quality	02/04/03
FF_2A1.8342_09_03	New ECM software level to unify P codes for knock sensor	02/05/03
FF_2A1.8342_10_03	New ECM software to unify ECM to cover both automatic and manual trans.	02/05/03
FF_2A1.8342_11_03	Rough idle and MIL on during 1 st 1000 revolutions after cold start related to fuel quality	02/07/03
FF_2A1.8342_12_03	Rough idle and MIL on during 1 st 1000 revolutions after cold start related to fuel quality	02/13/03
FF_2A1.8342_13_03	New ECM software level to modify characteristics for engine speed limiter	02/18/03
FF_2A1.8342_01_06	New ECM software level turns off EVAP check below 4°C	10/31/06
FF_2A1.8342_14_06	Introduction of new EVAP purge flow valve	11/07/06
FF_2A1.8342_15_07	New ECM software level to enhance system strategies for misfire detection, throttle contamination, catalyst diagnosis and EVAP system test as low ambient temps.	02/15/07
FF_2A1.8342_16_07	New ECM software to correct premature MIL on for catalyst efficiency fault.	03/13/07
FF_2A1.8342_17_07	New ECM software level to improve cold start behavior and the EVAP Purge Valve	03/14/07
FF_2A1.8342_18_09	New software calibration with and improved catalyst monitor calibration, an adjustment to diagnostic strategy air intake volume/time, an adjusted misfire monitor for part protection and an adjusted EVAP monitor below 40°F.	Feb. 24, 2009
FF_2A1.8342_19_09	Replacement Ignition Coil	December 2009

Prefix:

RC = Running Change

RF = Running Change / Field Fix

FF = Field Fix

VOLKSWAGEN

GROUP OF AMERICA

Mr. Jim Snyder
Compliance and Innovative Strategies Division
Office of Mobile Sources
U. S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, MI 48105

Ex. 7

Name
Title
Department
Phone
Fax
E-Mail

December 22, 2009 Date

Subject: Field Fix for MY 2002 Audi Test Group 2AD XV01.8346

Dear Mr. Snyder,

With this letter we wish to inform the agency of a Field Fix for the following test group:

VOLKSWAGEN GROUP OF AMERICA, INC.
3800 HAMLIN ROAD
AUBURN HILLS, MI 48326
PHONE 41248 754 5000

Test Group ;	2AD XV01.8346
Models	All
Transmission	All

The enclosed pages describe Field Fix FF_2A1.8346_09_09 which introduces new replacement ignition coil.

If you have any questions with regard to this information please contact our office in Auburn Hills at **Ex. 7**

Sincerely,

Ex. 7

Enclosure(s)

Field Fix MY 2001-2006

Subject:

Field Fix Nr.:	FF_1A1.8346_05_09	FF_2A1.8346_09_09
Model Year	2001	2002
Test Group:	1AD XV01.8346	2AD XV01.8346
Models:	all	all
Transmission:	all	all

Field Fix Nr.:	FF_3A1.8346_09_09	FF_4A1.8346_04_09
Model Year	2003	2004
Test Group:	3AD XV01.8346	4AD XV01.8346
Models:	all	all
Transmission:	all	all

Field Fix Nr.:	FF_5A1.8346_01_09	FF_6A1.8346_01_09
Model Year	2005	2006
Test Group:	5AD XV01.8346	6AD XV01.8346
Models:	all	all
Transmission:	all	all

Event: Customer complaint: MIL is flashing or constantly illuminated.

Analysis: DTCs for misfire in one or more cylinders are stored in the ECM.
The misfire condition can be caused by an inoperative ignition coil.

Activities: A new generation of ignition coils is being installed in production.
The improved ignition coil will be used in the workshop to satisfy customer.

Model	Part number new	Release Date
all	06A 905 115 D	Nov-09

Impact on
Emissions: This change does not cause an impact on emissions.

AUDI AG
12-21-2009

Running Change / Field Fix Log

Model Year: 2002
Test Group: 2ADXV01.8346

Evaporative Family: VW: 2ADXR0110234
Audi: 2ADXR0130242

Models: VW GTI, Golf, Jetta, Jetta Wagon, New Beetle
Audi TT, TT Roadster

RC / FF Number	Description of Change / Reason	Date
RC_2A1.8246_02_01	Horsepower increase and addition of new 5 speed automatic transmission to the Golf/Jetta	March 2001
RC_2A1.8346_03_01 (2346/01)	Horsepower increase and the addition of a 6 speed manual transmission to the New Beetle	December 21, 2001
RF_2A1.0346_04_02 (2346/03)	Revision of the fuel system calibration to prevent misfire after cold starts.	June 24, 2002
FF_2A1.8346_06_03 (F04ECM_1-3mAD)	New ECM calibration to prevent misfire in the first 1000 revolutions under certain conditions	April 7, 2003
FF_2A1.8346_07_06 (2-346/01/06)	EVAP leak monitor enabled above 5°C intake air temperature only.	May 2006 rolling
FF_2A1.8346_08_07	New software calibration to adjust the Catalyst Monitor to avoid false MIL illumination and adjust the Misfire Monitor to improve part protection based on newer model year experience.	August 2007 rolling
FF_2A1.8346_09_09	Replacement Ignition Coil	December 2009

Prefixes:
RC = Running Change
RF = Running Change/Field Fix
FF = Field Fix

VOLKSWAGEN

GROUP OF AMERICA

Mr. Jim Snyder
Compliance and Innovative Strategies Division
Office of Mobile Sources
U. S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, MI 48105

Ex. 7

Name
Title
Department
Phone
Fax
E-Mail

December 22, 2009 Date

Subject: Field Fix for MY 2002 Audi Test Group 2AD XV01.8347

Dear Mr. Snyder,

With this letter we wish to inform the agency of a Field Fix for the following test group:

VOLKSWAGEN GROUP OF AMERICA, INC.
3800 HAMLIN ROAD
AUBURN HILLS, MI 48326
PHONE +1 248 754 5000

Test Group ;	2AD XV01.8347
Models	All
Transmission	All

The enclosed pages describe Field Fix FF_2A1.8347_01_09 which introduces new replacement ignition coil.

If you have any questions with regard to this information please contact our office in Auburn Hills at **Ex. 7**

Sincerely,

Ex. 7

Enclosure(s)

Field Fix MY 2001-2002

Subject:

Field Fix Nr.:	FF_1A1.8347_01_09	FF_2A1.8347_01_09
Model Year	2001	2002
Test Group:	1AD XV01.8347	2AD XV01.8347
Models:	all	all
Transmission:	all	all

Event: Customer complaint: MIL is flashing or constantly illuminated.

Analysis: DTCs for misfire in one or more cylinders are stored in the ECM.
The misfire condition can be caused by an inoperative ignition coil.

Activities: A new generation of ignition coils is being installed in production.
The improved ignition coil will be used in the workshop to satisfy customer.

Vehicle Type	Part number new	Release Date
all	06A 905 115 D	Nov-09

Impact on
Emissions: This change does not cause an impact on emissions.

AUDI AG
12-21-2009

Running Change / Field Fix Log

Model Year: 2002
Test Group: 2ADXV01.8347
Evaporative Family: Audi: 2ADXR0130242

Models:
Audi TT Quattro

RC / FF Number	Description of Change / Reason	Date
FF_2A1.8347_01_09	Replacement Ignition Coil	December 2009

Prefixes:
RC = Running Change
RF = Running Change/Field Fix
FF = Field Fix

VOLKSWAGEN

GROUP OF AMERICA

Mr. Jim Snyder
Compliance and Innovative Strategies Division
Office of Mobile Sources
U. S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, MI 48105

Ex. 7

Name
Title
Department
Phone
Fax
E-Mail

December 22, 2009 Date

Subject: Field Fix for MY 2002 Audi Test Group 2AD XV03.0344

Dear Mr. Snyder,

With this letter we wish to inform the agency of a Field Fix for the following test group:

VOLKSWAGEN GROUP OF AMERICA, INC.
3800 HAMLIN ROAD
AUBURN HILLS, MI 48326
PHONE +1 248 754 5000

Test Group ;	2AD XV03.0344
Models	All
Transmission	All

The enclosed pages describe Field Fix FF_2A3.0344_03_09 which introduces new replacement ignition coil.

If you have any questions with regard to this information please contact our office in Auburn Hills at **Ex. 7**

Sincerely,

Ex. 7

Enclosure(s)

Field Fix MY 2002-2004

Subject:

Field Fix Nr.:	FF_2A3.0344_03_09	FF_3A3.0344_02_09
Model Year	2002	2003
Test Group:	2ADXV03.0344	3ADXV03.0344
Models:	all	all
Transmission:	all	all

Field Fix Nr.:	FF_4A3.0344_01_09
Model Year	2004
Test Group:	4ADXV03.0344
Models:	all
Transmission:	all

Event: Customer complaint: MIL is flashing or constantly illuminated.

Analysis: DTCs for misfire in one or more cylinders are stored in the ECM.
The misfire condition can be caused by an inoperative ignition coil.

Activities: A new generation of ignition coils is being installed in production.
The improved ignition coil will be used in the workshop to satisfy customer.

Model	Partnumber new	Release Date
all	06C 905 115 M	Nov-09

Impact on
Emissions: This change does not cause an impact on emissions.

AUDI AG
12-21-2009

Running Change / Field Fix Log

Model Year: 2002

Test Group: 2ADXV03.0344

Evaporative Family: Audi: 2ADXR0140232

2ADXR0140233

2ADXR0140262

Models: A4, A4 Quattro, A6, A6 Quattro

RC / FF Number	Description of Change / Reason	Date
RC_2A3.0344_01_01	Addition of Audi A4 Avant quattro model	11/01/2001
FF_2A3.0344_02_02	The revision of the OBD system calibration to reduce false Malfunction Indicator Light (MIL) illumination. The diagnosis threshold has been changed in the Engine control Modules (ECM).	5/31/2002
FF_2A3.0344_03_09	Replacement Ignition Coil	December 2009

Prefixes:

RC = Running Change

RF = Running Change/Field Fix

FF = Field Fix